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AN INVESTIGATION OF SOME OF THE VALUES HELD BY HIGH SCHOOL STUDENTS AND THEIR TEACHERS IN A RURAL COUNTY IN ALBERTA

A Thesis
Submitted to
The Faculty of Graduate Studies
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In Partial Fulfillment
of the Requirements
for the Degree of
Master of Education

by
James Fredrick Lavers

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Investigation of Some of the Values Held by High School Students and Their Teachers in a Rural County in Alberta," submitted by James Fredrick Lavers in partial fulfillment of the requirements for the degree of Master of Education.

ABSTRACT

This research was conducted to investigate values of students and teachers residing in a rural area in the Province of Alberta.

These values were expressed as variables on a student and teacher questionnaire. In addition, hypotheses were proposed to measure differences in student and teacher values on the total score and subscores obtained from the instrument employed. The scores derived from the Differential Values Inventory (DVI) were used to determine if the two groups were significantly different.

Two instruments were used to collect data from forty-four junior-senior high school students and thirty-seven teachers who taught in six junior-senior high schools in a rural county near Edmonton.

The instruments used were: a Student Questionnaire which included items from the Gough Home Index Scale, a Teacher Questionnaire, and the DVI. The Student Questionnaire and the Teacher Questionnaire had matched items which were selected for analysis. Study was made of sex-based differences on the same variables for both students and teachers.

The collected data were punched on IBM cards for computer analysis of five hypotheses. Computer programs

ABSTRACT

This study was concerned with the [illegible] of students and teachers [illegible] in a [illegible] in the Province of Alberta.

These [illegible] were [illegible] by means of a student and teacher questionnaire. In addition, hypotheses were proposed to examine differences in student and teacher [illegible] on the total scale and subscales obtained from the instrument employed. The [illegible] derived from the [illegible] Inventory (RVI) were used to determine if the two groups were significantly different.

The instruments were used to collect data from forty-four [illegible] students and forty-seven teachers who taught in the [illegible] high schools in a rural [illegible].

The [illegible] which included items from the [illegible], a Teacher Questionnaire [illegible] (RVI). The student questionnaire and the teacher questionnaire [illegible] items which were selected for analysis. [illegible] differences on the [illegible] students and teachers.

The [illegible] at the [illegible] level. The [illegible] of the investigation [illegible]

used were those developed by the Division of Education Research Services, The University of Alberta.

It was found that students were more achievement oriented than teachers, but there was no significant difference on any of the subscales of the DVI between students and teachers relative to their values. Therefore, it was concluded that the students and teachers in the study held similar values.

The socio-economic status of students as measured by the Gough Home Index Scale was found to be completely unrelated to the values of the students as measured by the DVI.

Significant differences could not be found between the values held by female and male students or between female and male teachers for the variables selected in this study. This consistency does not support the prevalent notion that there is a high degree of difference in what girls and boys, or women and men, in the educational process at the high school level value.

A major conclusion from this study is that rural students value an education regardless of their economic status, since no significant difference could be found between the high and low socio-economic groups relative to value they placed on education. Students with fewer economic resources presented DVI scores of the same rank as their most affluent and traditional classmates.

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The writer wishes to acknowledge his gratitude to the members of the Department of Industrial and Vocational Education for their endeavours on his behalf, particularly the criticisms of Dr. W. W. Pearson and Mr. J. E. Gallagher.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

FIGURE PAGE

CHAPTER I

INTRODUCTION

Orientation to the Problem

The notion is ubiquitous in our society that there is a distinct social difference between teen-agers and those who are a generation older. This belief in social difference is in regard not only to such things as dress, which might be an indication of real difference in social viewpoint, but also to such fundamentals as the things that these young people value relative to their seniors in society. Also it may be that because of mass media and the emphasis on becoming part of the subculture the young person's economic status may have an effect on what he comes to value.

Although the pervasive influence of the home remains, another important group are the teachers of the present generation. Comparison of teachers with the young people in terms of their value system forms a part of the study.

In conducting his research Cathcart[1] assumed that a paper and pencil test which gives a measure of values on a traditional to emergent continuum was a meaningful way to

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[1] W. G. Cathcart, "An Investigation of Some of the Values Held by High School Students and Their Teachers" (unpublished Master's thesis, The University of Alberta, Edmonton, 1957).

study values.

Cathcart found that urban students were more achievement oriented than teachers and that teachers were more independent than students as measured by the Differential Values Inventory (DVI) subscales. However, he was not able to conclude for all of the DVI scales that there was a significant difference between students and teachers on the values held by each group. He also concluded that a student's socio-economic rating had no influence on values held by the student. Another finding of Cathcart's research was that students perceived education as more important than athletics or popularity.

This investigation was a follow-up of Cathcart's study of the values of students and teachers from a rural milieu. It was also concerned with the effects that economic status had on the values held by students.

Significance of the Study

The research findings of Spindler[2] and Getzels[3] have shown that substantial variations in attitudes and values

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[2] George Spindler, "Education in the Transforming American Culture," Harvard Educational Review, No. 25, 1967.

[3] Jacob Getzels, "The Acquisition of Values in School and Society," The High School in a New Era, Francis S. Chase and Harold Anderson, editors (Chicago: University of Chicago Press, 1958).

exist among the various groups connected with the educational process: teachers, students, school administrators, members of school boards, parents and other professional groups.

Local, regional and American studies of the values held by teachers and students have been completed.[4] Researchers who conducted these investigations examined a particular segment of the population of students and teachers in an urban environment and omitted students from rural areas. What rural students and teachers value is of importance to society and may, in part, reflect the general direction or trend of that society so far as its value system or systems are concerned.

For this reason it was determined that an investigation be made of the values of students and teachers in a rural setting to determine the values held by students and teachers in that kind of an environment.

Purpose of the Study

The purpose of this study was: (1) to investigate the

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[4] Cathcart, *op. cit.*; Eugene Ratsoy, "Attitudes of Prospective Teachers" (Master of Education thesis, University of Alberta, Edmonton, 1967); David Friesen, "Value Climates in Canadian High Schools," *Canadian Administrator*, Vol. VI, No. 1 (October, 1966); William Knill, "High School Students are Idealistic," *Canadian Home and School*, 22:6-9, June, 1963.

values held by students and teachers in a rural setting and (2) to draw a clearer line describing the position of these two important groups on a traditional-emergent continuum.

Research Questions

The major question studied was the identification and interrelationship of some of the values held by high school students and their teachers in a rural area.

A second question studied was the social and personal correlates that existed within the student and the teacher groups.

Stated in more specific terms the research hypotheses were:

1. There is no significant difference in the values held by teachers and students as measured by the DVI.

2. There is no significant difference in the values held by high socio-economic students when compared with low socio-economic students.

3. There is no significant difference in the values of the students of one sex when compared with the other.

4. There is no significant difference in the values of teachers of one sex when compared with the other.

Scope of the Study

This study was regional in scope and involved two distinct groups of participants. One of these groups was

made up of forty-four senior high school students. The other was made up of thirty-seven teachers who taught these students in the six selected public junior-senior high schools.

Delimitations

The study was delimited to:

1. the students and teachers in the senior high schools selected for the study.

2. the students and teachers who participated in the research by responding to questions on the research instruments.

3. the schools, students and teachers in a rural county in the province of Alberta.

4. the instruments selected and used to collect pertinent and relevant data for analysis.

Assumptions

It was assumed that an individual's values can be measured by means of a written test and that the traditional-emergent continuum which is the result of a total score derived from a questionnaire is a meaningful way to study values.

Because the instruments selected to collect data for the research were previously used by Cathcart and were checked for validity and reliability by him, it was assumed

that these instruments were valid and reliable. Another assumption that was made was that all of the participants completed these instruments accurately and honestly.

Population of the Study

The study consisted of two groups: students who attended public high school in the County of Leduc and teachers who taught in these schools. Involved in the research were 44 students from a population of 2,056 students, and 37 teachers from a population of 104 teachers.

Definition of Terms

The following operational definitions apply to this particular study:

The definition of Value given by Kluckhohn was found to be acceptable.

> A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action.[5]

Traditional value pattern

> is a pattern which is characteristic of an individual who emphasizes the work-success ethic, a future-time orientation, independence, and Puritan morality on the DVI.

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[5] Clyde Kluckhohn, "Values and Value-Orientations in the Theory of Action," Toward a General Theory of Action, Talcott Parsons and E. Shils, editors (Cambridge: Harvard University Press, 1959), p. 395.

Emergent value pattern

is a pattern which is characteristic of an individual who emphasizes sociability, present-time orientation, conformity and moral relativism on the DVI.

High socio-economic class student

is one who scores nine or higher on the Gough Home Index Scale.

Low socio-economic class student

is one who scores eight or less on the Gough Home Index Scale.

Instruments Selected for the Study

Two instruments were used in this study: The Differential Values Inventory (DVI) and the Gough Home Index Scale. The DVI measures values on a dichotomous scale with the higher scores, up to a maximum score of 80, indicating traditional values; i.e., work-success, future-time orientation, independence and Puritan morality, as opposed to emergent values of sociability, present-time orientation, group conformity and relativism. Replication of part of Cathcart's study formed part of the base of this study, and the current revised form of the DVI which he helped to develop was used. The Gough Home Index Scale uses features of the student's home environment to give a scale of affluence from 0 to 20. A higher number indicates a greater degree of affluence. The cut-off point in determining affluence was established

by Gough at 8.0. Those below that point were considered poor. The Gough Home Index Scale was incorporated into the general student questionnaire used by Cathcart and remained in the format developed by Cathcart in this study.[6]

MAJOR STEPS OF THE STUDY

Testing the Instruments

Both the DVI and the Gough Home Index Scale had previously been pretested and used with students in Canada by Cathcart and in the United States by Prince. These researchers considered these instruments to be reliable and valid.

The purposes of the pilot study were:

1. to familiarize the researcher with the administration procedures, instrument deficiencies and information reclamation.

2. to confirm if the items selected from the other instruments were appropriate to this study.

The cooperation of the County of Lacombe High School Counselling Services was solicited to conduct a pilot study to pretest the instruments selected for the study. This

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[6] Cathcart had added and changed items to update them from those used by previous researchers. A sample copy of this instrument can be found in Appendix C, p. 93. Items 31 through 50 represent this revised Gough Home Index Scale.

group agreed to cooperate in this phase of the research.

Selection of Schools

The schools selected to participate in the study were public schools; five were junior high schools and the remaining one was a senior high school. All schools selected were in a rural county of Alberta and were similar in size, pupil enrolment, and teaching staff.

Selection of Participants

Students and teachers who participated in the study were not randomly selected. They were selected at the request of high school principals to volunteer to participate in the study by completing the necessary and appropriate research instrument. A guide to selection of participants was provided by the researcher.[7]

Administering the Research Instruments

All instruments were administered during the same week of the fall term (1968) by the administrators of the schools participating in the study.

Analysis of Data

Analysis of the data collected from responses of the participants was made with the assistance of personnel and

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[7] Letter to principals, Appendix F.

equipment of the Division of Education Research Services, The University of Alberta.

Hypothesis 1--significance of difference in values of students and teachers: the results of analysis were unable to show significant overall or part-scale differences in the values of students and teachers who responded in this study.

Hypothesis 2--students' values and economic status: analysis on a linear basis failed to show that students' values and their economic status were related.

Hypothesis 3--significance of difference between students and teachers for selected matched items from the questionnaires: analysis failed to show significant differences in most items. Church attendance, kinds of television programs watched and degree of involvement in the community were significantly different for the two groups.

Hypothesis 4--significance of difference for female and male students for the same selected variables as in hypothesis 3 from the student questionnaire: analysis failed to reveal significant differences for any of the variables selected.

Hypothesis 5--significance of difference between female and male teachers for the same variables as in hypotheses 3 and 4: teachers were also identical in that there were no significant differences evident for the

selected variables.

From the results obtained an analysis was made, reported (Chapter IV) and followed by recommendations based on results and for further research (Chapter V).

CHAPTER II

RELATED LITERATURE

Over a great period of time much has been written about the subject of values. Socrates made the following comments on the youth of his day:

> . . . the children now love luxury; they have bad manners, contempt for authority; they show disrespect for their elders and love chatter in place of exercise . . . and tyrannize their teachers.[8]

The comments in the above statement could serve equally well for almost any generation. While they are pleasant to quote, they are not very definitive.

Scientific attempts to define, rationalize and test for values have become more common in the last few decades. The remainder of this chapter will review the subject of values under several headings: Background of the DVI; Research Using the DVI; The Adolescent Society and Its Values; Socio-economic Class and Student Values.

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[8] David Friesen, The Urban Teenager (Edmonton: University of Alberta Press, 1969), p. 12.

Background of the DVI

The DVI was developed and tested by Prince in 1957 on the basis of the theory related by Spindler[9] and elaborated by Getzels.[10]

Spindler analyzed anthropological and sociological writings as well as conducting a longitudinal study with several hundred college students in which he used value-projective techniques of a written nature. From this he concluded that "a major shift in American values had, and is taking place."[11] He suggested that the shift in values was from traditional to emergent. The traditional values include: Puritan morality, work-success ethic, individualism, achievement orientation, and future-time orientation. The emergent values were categorized into sociability, relativistic moral attitude, consideration for others, hedonistic, present-time orientation and conformity to the group.

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[9] George D. Spindler, "Education in a Transforming American Culture," *Harvard Educational Review*, 25:145-156, Summer, 1955.

[10] Getzels, *op. cit.*, p. 6.

[11] Spindler, *op. cit.*, p. 149.

Spindler's model of his conception of this range in values included various pertinent groups playing roles in education. He placed these groups on the emergent-traditional continuum represented in Figure 1.

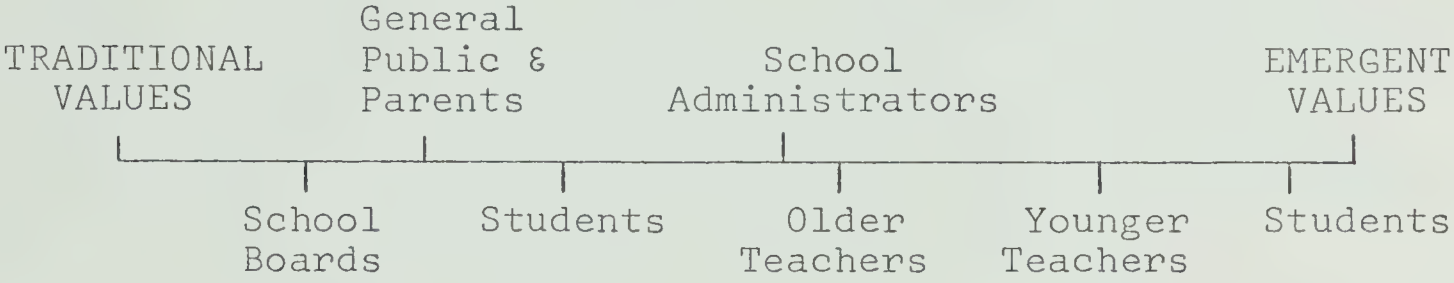

FIGURE 1

EDUCATIONAL GROUPS PLACED ON TRADITIONAL-EMERGENT VALUES CONTINUUM[12]

An assumption made by Spindler based on his research findings was that older teachers, because of their age and time of childhood training, would be more traditional in their values than would the younger teachers who had been exposed to a more emergent educational culture. He also assumed that because administrators had to deal with the school board and parent groups there was a greater probability that they would be more traditional than teachers. Spindler placed students at two places on the continuum because:

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[12] Spindler, "Education in a Transforming American Culture," Harvard Educational Review, p. 151.

> . . . those coming from traditionalist family environments will tend to hold traditionalistic values, but hold them less securely than will their parents . . . while other students who come from emergent-oriented families will tend to place even further, as a function of their age and peer groups, towards the emergent end of the line than their parents would.[13]

Spindler indicates that because of the dichotomous nature of a student's upbringing and of the society in which the student finds himself he may appear at two locations on the continuum as he proceeds through school and life.

Getzels[14] elaborated on Spindler's traditional-emergent framework. His treatise of 1960 stated that certain values were "sacred" in America; these were democracy, individualism, equality and human perfectibility. Getzels elaborated on Spindler's model by stating that the secular values that accompany these sacred values were in transition, as follows:

1. from work-success to sociability; for instance, the tendency to frictionless interpersonal relations.

2. from future-time to present-time orientation; that is, from self-denial to hedonism.

3. from personal independence to group conformity; autonomy replaced by compliance.

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[13] _Ibid._, p. 152.

[14] Getzels, _op. cit._

4. from Puritan morality to moral relativism; moral relativism replacing moral commitment.

Research Using the DVI

In order to conduct his research on the values held by students, Spindler developed the theoretical basis for the DVI. This theory was subsequently refined by Getzels. In its final form as an instrument, the DVI was developed and first used by Prince.[15] McPhee,[16] Abbott,[17] Lupini,[18] and Marion[19] also used the DVI to relate the scores they obtained to some aspect of administrative or teacher activity and orientation.

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[15] Richard Prince, "Individual Values and Administrative Effectiveness," Administrator's Notebook, Vol. VI, No. 4, December, 1957.

[16] Roderick F. McPhee, "Individual Values, Educational View-Points, and Local School Approval," Administrator's Notebook, Vol. VII, No. 8, April, 1959.

[17] Max G. Abbott, "Values and Value-Perceptions in Superintendent-School Board Relationships," Administrator's Notebook, Vol. IX, No. 8, December, 1960.

[18] Dante Lupini, "A Study of the Relation of Differential Values to Social and Administrative Interactions" (unpublished Ph. D. dissertation, University of Alberta, Edmonton, 1965).

[19] Guy Marion, "A Study of Selected Factors Related to the Innovations of Elementary School Principals" (unpublished Ph. D. dissertation, University of Alberta, Edmonton, 1966).

Helm,[20] and Cathcart[21] at the local level, have made use of the DVI with large numbers of students. Friesen[22] also used the DVI along with revised economic scales in a large urban study.

McPhee[23] used the DVI with a sample of 602 citizens and found there was no relationship between exposure to a culture and change to a more emergent view. He found, also, that older respondents among the adults tended to view the school with less approval.

The results of the research conducted by Lupini[24] supported that of Prince. He found that female teachers were less traditional than their male counterparts.

Marion's[25] study tended to support the development of the DVI by Prince in that when it was applied to administrators the more innovative principal scored toward the emergent

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[20] Nathan Teal Helm, "An Analysis of Value Patterns of Selected Junior High School Students of Varying Degrees of Academic Achievement and of Differing Socio-Economic Background" (unpublished Ed. D. dissertation, University of Utah, 1966).

[21] Cathcart, _op_. _cit_.

[22] David Friesen, _The Urban Teenager_ (Edmonton: University of Alberta Press, 1969).

[23] McPhee, _op_. _cit_.

[24] Lupini, _op_. _cit_.

[25] Marion, _op_. _cit_.

end of the continuum. A significant finding of Helm's[26] study was that socio-economic status was not related to values but that the degree of academic achievement was. Age of the student, church attendance, part-time work, and a preference for academic work were all related to a more traditional score. He also found boys, at the junior high school level, more traditional than girls.

Cathcart surveyed the value system of teachers and students and the socio-economic status of these students. He found that students and teachers did vary in their values, but only in certain areas. He was not able to show any change in this variation from high to low socio-economic students relative to the teacher group, nor was he able to show any significant difference between the values held by high and low socio-economic groups of students.

Concerning personal and family variables, Cathcart's analysis was considered to be unsuccessful in establishing relationships between these variables and the test scales. A significant relationship to traditional scores was found regarding ages of students but was contradicted by the fact that there was no significant difference between school grade and DVI score. The results of his study did not reveal significant differences relative to the sex of students,

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[26] Helm, op. cit.

although boys were found to be more achievement oriented and scored high on the traditional value, work-success. A difference was also discovered regarding life choice and value placed on education.

Regarding academic orientation, Cathcart found some significance between homework and out-of-school activities, and these related positively to a high DVI score. Negative correlations were found regarding the amount of time spent with the gang, dating or watching T.V.

Cathcart found that the emergent student placed wealth and fame in first positions with only a small but highly emergent group concerned about fame, while the traditional student placed education first with a small group placing faith as a central value. The group which chose faith as a central value was the most traditional and scored highest on the DVI scale. Girls placed education first (36.6 per cent) and faith second (31.0 per cent) while boys placed wealth first (41.1 per cent) and education second (38.3 per cent). Collectively, education came first and wealth second.

Closely connected with education and wealth is the question of what one should be remembered for. Cathcart, Friesen[27] and other researchers in eastern and western

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[27] David Friesen, "Academic-Athletic-Popularity Syndrome in the Canadian High School Society" (1967), p. 10. (Mimeographed.)

Canada have found a pattern which is entirely at odds with Coleman's[28] research findings for the United States. Their results are presented in summary form in the table below.

TABLE I

"WANTED TO BE REMEMBERED FROM HIGH SCHOOL AS . . ."

Researcher	Outstanding Student	Leader, Athletics, etc.	Popular
Edmonton and district (Cathcart)	40.9%	35.2%	23.9%
Edmonton city (Friesen)	43.5%	26.0%	30.5%
Eastern Canada	54.0%	25.4%	17.3%
Western Canada	60.8%	22.6%	15.1%

When Cathcart asked the question, "characteristic most needed for life?" he found that the choices were reversed. Personality (57.1 per cent) and friendliness (14.6 per cent)--total 71.7 per cent--were the choices of the students he sampled. Whereas academic achievement (19.7 per cent), money (7.6 per cent) and athletics (1.0 per cent) made up less than 30 per cent of the choices. This would seem to indicate that a dichotomy exists in the students' thinking in that high and low socio-economic student groups

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[28] James S. Coleman, The Adolescent Society (New York: Free Press of Glencoe, 1961), pp. 28-30.

all agreed that personality and academic progress were both important values.

He also found that church membership and church attendance provide somewhat contradictory but revealing data. Those students who belonged to a church were more traditional as measured by the DVI, but the more pronounced difference came with those who were regular attenders. The failure of the church to attract young people in a meaningful way is evident in that two thirds of Cathcart's sample belonged to a church, only half went at all and less than one quarter attended regularly.

In regard to involvement in school and community activities, Abrahamson[29] found a high correlation between the student's intermural and extra-curricular activities and his DVI score as well as his socio-economic rating.

Spindler and Getzels' theorizing, and their model, plus Prince's development of the DVI, support the notion that society is undergoing change from a more traditional to a more hedonistic, emergent view. Apparently this is related to the age of the person involved, whether school board member, teacher, principal or student.

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[29] Stephen Abrahamson, "Our Status System and Scholastic Rewards," Journal of Educational Psychology, 25:441-450, April, 1951; David Friesen, "Some Characteristics of High School Students from Three Socio-Economic Groups," p. 9. (Mimeographed.)

The research mentioned predicates the existence of a teen-age subculture with a group of students holding traditional views apparent also.

Wattenberg's[30] study of the social origins of teachers in Detroit, while emphasizing upward social mobility, indicated the acceptance of middle-class traditional values. McGuire and White[31] in examining the social origins of teachers in Texas determined that teachers accepted middle-class standards of behavior and traditional values as part of their own and society's form of maintenance and development.

Support for this view, as applied to teachers, also comes from Havighurst and Neugarten, who wrote:

> . . . by and large most teachers in America participate with other middle-class persons and they fit into the social structure of their communities as middle-class people. Even more certainly most teachers are middle-class in terms of their attitudes, values and way of life.[32]

Other American researchers such as Warner, Havighurst

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[30] William Wattenberg, et. al., "Social Origins of Teachers--A Northern Industrial City," The Teacher's Role in American Society, Fourteenth Yearbook of the John Dewey Society (New York: Harper and Brothers, 1956), pp. 13-22.

[31] Carson McGuire and George White, "Social Origins of Teachers--in Texas," The Teacher's Role in American Society Fourteenth Yearbook of the John Dewey Society (New York: Harper and Brothers, 1957), pp. 23-41.

[32] Robert J. Havighurst and Bernice L. Neugarten, Society and Education (Boston: Allyn and Bacon, 1957), p. 361.

and Loeb give support to the findings of Havighurst and Neugarten when the former wrote:

> . . . the teacher will inevitably be an exemplar for the class with the most social energy. At the present time in America that is the middle class. . . . Unless the middle class values change in America, we must expect the influence of the schools to favor the values of material success, individual striving, thrift and social mobility.[33]

In his research, Prince[34] found that the older teacher's traditionalism approached that of the school administrator who participated in his investigation.

The Adolescent Society and Its Values

In the United States Coleman speaks of the emergence of an adolescent subculture. He claims that high school students:

> . . . constitute a small society, one that has most of its important interactions within [emphasis Coleman's] itself, and maintains only a few threads of connection with the outside adult society . . . it is hard to realize that separate sub-cultures can exist right under the very noses of adults . . . sub-cultures with languages all their own, with special symbols and, most importantly, with value systems that may differ from adults.[35]

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[33] W. Lloyd Warner, et. al., Who Shall Be Educated (New York: Harper and Brothers, 1944), pp. 171-172.

[34] Richard Prince, "Individual Values and Administrative Effectiveness," Administrator's Notebook, Vol. VI, No. 4, December, 1957.

[35] James S. Coleman, The Adolescent Society (New York: The Free Press of Glencoe, 1961), p. 3.

Coleman found that the adolescent society emphasized athletics and popularity at the expense of scholastic attainment. Another characteristic of the adolescent group which Coleman found was their hedonistic orientation. He found, also, that the ability to stir up a little excitement was very important in order to be popular or a member of the leading crowd [Coleman's term] in the school. Dancing and other social events were an important part of the life of the adolescent.

Hollingshead[36] observed that the youth of Elmtown were also pleasure-oriented. The hedonistic, fun-loving aspect of high school students is probably the popular conception that the public has of this group.

In a study involving Canadian students, Knill[37] found that there was another rather distinct group of high school students who did not conform to the conception of a high school student mentioned in the American study by Coleman. Knill found these students traditional, stable and future-time oriented.

Similarly Coleman found that besides the leading

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[36] August B. Hollingshead, Elmtown's Youth (New York: John Wiley and Sons, 1949), Chapters 12 and 13.

[37] William D. Knill, "The Teenage Sub-culture" (Part One: The High School as a Social System), The Saskatchewan Bulletin, 29:35, February, 1963.

crowd there were other groups formed on the basis of traditional values such as academic achievement.

Hollingshead described the student group by social class, differences in activities, attitudes, and values; but perhaps the best description of this group was given by Elkin and Westley in Suburban Town. These investigators wrote that the adolescents there:

> . . . are not compulsively independent and rejecting of adult values; they are not concerned solely with immediate pleasurable gratifications. Furthermore, in regard to those aspects of their lives which might be regarded as youth culture, they are remarkably sophisticated, they themselves pointing out that their dating patterns and their "kidding around" are passing temporary phenomena.[38]

Socio-economic Class and Student Values

American research findings indicate that differences in the socio-economic background of students seem to affect their school life and their value system.

Hollingshead,[39] using five social classes, with Class I the highest and Class V the lowest, found a definite relationship between social class and type of high school program in which the students enrolled. Class I students enrolled in university entrance programs and those in Class V

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[38] Frederick Elkin and William Westley, "The Myth of Adolescent Culture," American Sociological Review, 20:684, December, 1955.

[39] Hollingshead, op. cit., pp. 168, 462.

elected general or commercial programs.

Another finding of Hollingshead's research was that the amount of time spent in leisure and pleasure activities varied inversely with class position.[40]

Gavinchuk[41] found that lower-class students were not interested in courses being offered and that they preferred work to school.

Summary

A number of studies were discussed which made use of the DVI in conjunction with other measures of social or economic adjustment or rank. The findings from these studies support the research findings of Spindler, particularly for teacher related groups.

In reviewing the literature directed at the adolescent society and its values the following was found:

1. For results obtained from Canadian studies, differences appear from those obtained in the United States.

2. Canadian research results tend to show that Canadian students are, for the most part, more traditional than their American counterparts.

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[40] Hollingshead, op. cit., p. 299.

[41] Kay Gavinchuk, "Academic Careers of Students Related to Ability, Choice of Program and Size of High School" (unpublished Master of Education thesis, University of Alberta, Edmonton, 1966), p. 139.

3. Evidence is not clear cut, however, as to this difference between the two teen-age groups, and studies of urban teen-agers[42] show the same bias toward traditional values based on greater affluence as the American researchers found. As Cathcart indicates, his sample of students from the Edmonton area may not accept affluence as a measure of traditional values orientation. Knill's study in Saskatchewan indicated that parochial school students are generally more traditional than their public school counterparts.

In this chapter background information which led to the development of the DVI and the leaders who established a theoretical base for this instrument were presented.

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[42] Friesen, *The Urban Teenager*, *op. cit.*

CHAPTER III

METHOD OF ANALYSIS

In this chapter the hypotheses related to the problems are re-stated. The various instruments used to collect data are discussed and the collection and analysis of these data are outlined.

HYPOTHESES

This study limits itself, in part, to operational hypotheses established by Cathcart for his research investigation; two of his four hypotheses were included. Hypothesis 1 is taken directly from Cathcart, who stated this hypothesis in this way:

Hypothesis 1[43]

There is no significant difference between the student means on the DVI and the teacher means on the DVI.

Stated symbolically the null hypothesis is

$$H_0: \ X_T = X_S$$

with the alternate hypothesis being

$$H_1: \ X_T \neq X_S$$

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[43] Cathcart, Hypothesis 1, in Cathcart, *op. cit.*

Hypothesis 2 is also taken directly from Cathcart, who stated it thusly:

Hypothesis 2[44]

There is no significant difference between the high socio-economic class student means on the DVI and the low socio-economic class student means on the DVI.

Stated symbolically the null hypothesis is

$$H_0: \quad X_{HS} = X_{LS}$$

with the alternate hypothesis

$$H_1: \quad X_{HS} \neq X_{LS}$$

These hypotheses apply to the total DVI score and to each of its eight subscale scores, which are: (1) work-success ethic, (2) future-time orientation, (3) independence, (4) Puritan morality, (5) sociability, (6) present-time orientation, (7) conformity, and (8) moral relativism.

Students and teachers were compared also using the responses obtained from the questionnaire each group answered. Items selected for comparison were those which were matched for students and teachers. These items were:

1 and 2--church membership and attendance.

3 and 4--television viewing time and type of programs.

5--movie viewing time.

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[44] Cathcart, Hypothesis 4, in Cathcart, *op. cit.*

6 and 7--number of activities in and out of school.

8 and 9--life choices and sources of concern.

10--school leaving, whether student or professional.

11, 12 and 13--work-success ethic; qualities needed for success, relation of values to money and responsibility.

14--value of personal reputation.

The following hypotheses apply to each one of the selected variables.

<u>Hypothesis 3</u>

There is no significant difference at the .05 level between students and teachers for any of the fourteen selected variables.

Stated symbolically the null hypothesis is

$$H_0: \quad X_S = X_T$$

with the alternate hypothesis

$$H_1: \quad X_S \neq X_T$$

<u>Hypothesis 4</u>

There is no significant difference at the .05 level of significance between female and male students for any of the fourteen selected variables.

Stated symbolically the null hypothesis is

$$H_0: \quad X_{FS} = X_{MS}$$

with the alternate hypothesis

$$H_1: \quad X_{FS} \neq X_{MS}$$

Hypothesis 5

There is no significant difference at the .05 level of significance between female and male teachers for any of the fourteen selected variables.

Stated symbolically the null hypothesis is

$$H_0: \quad X_{FT} = X_{MT}$$

with the alternate hypothesis

$$H_1: \quad X_{FT} \neq X_{MT}$$

INSTRUMENTS

The instruments selected for the research were the DVI and the Gough Home Index Scale.

DVI

The DVI is constructed of sixty-four pairs of forced choice items based on the Spindler-Getzels conceptual framework. One item in each pair represents a traditional value and the other an emergent value. There are sixteen items for each of Getzels' eight subcategories of values.

Validity and reliability. The DVI has been used in a number of studies and tended to support the underlying theory developed by Spindler and Getzels regarding the shift in values taking place in North America. It appears to have an

acceptable degree of construct validity.[45] Since repeated measures of the DVI tend to confirm these predications, the instrument is assumed to have an acceptable degree of reliability.

Cathcart notes that one major weakness of the DVI is the repetition of some items which use different alternatives. Consistent responses rather than thoughtful ones may be a problem and, therefore, make the results less accurate or meaningful.

Also, a respondent may make a choice between different pairs of alternatives from different points of view depending upon the wording of the item. Choices could be made from a political, academic, religious or social point of view and the DVI would not differentiate among these responses. These differing responses might also belong to the same value scale or subscale.

Examination of the subscales is necessary, particularly for those respondents scoring near the theoretical mean of 32, since they may in fact have achieved that total score by being exceptionally high and low on the subscales.

In scoring the DVI a value of one is given for each

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[45] Lee J. Cronbach, Essentials of Psychological Testing (New York: Harper and Row, 1960), p. 120. "Construct validity" as it is used in this paper can be defined as "an analysis of the meaning of test scores in terms of psychological concepts."

traditional item chosen and a zero for items which are scored on the emergent scale or subscales. (See Appendix B, p. 89, scoring key for the DVI.) The DVI appears as Appendix A, p. 81, under the heading "I Ought to . . ." Questionnaire.

Gough Home Index Scale

Gough[46] developed the Home Index Scale using the basic assumption that socio-economic status is measured best by a combination of indices. The Gough Home Index Scale is part of the student questionnaire, items 31-50 inclusive.

Gough obtained a test-retest reliability coefficient of 0.989 when he used the test with a small group of fifty-five college students.

Elley[47] modified Gough's Home Index Scale to make it more applicable to Alberta. He tested this in two ways. On the corrected split-half reliability test a coefficient of 0.77 was obtained and on a comparison with Blishen's Occupational Class Scale a correlation of 0.61 was obtained.

Cathcart modified Elley's scale slightly, by the

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[46] Harrison G. Gough, "A Short Social Status Inventory," Journal of Educational Psychology, 40:52-56, January, 1949.

[47] Warwick B. Elley, "A Comparative Analysis of the Socio-Economic Bias in Selected Intelligence Tests" (unpublished Ph. D. dissertation, University of Alberta, Edmonton, 1961).

inclusion of items regarding a stereo record player and color T.V., items 38 and 49 of the Student Questionnaire. Cathcart's modified scale was used in this research.

The Gough Home Index Scale is scored by counting one score for every "yes" answer only. The possible range of scores is from 0 (lowest possible socio-economic status) to 20 (highest possible socio-economic status).

Student Questionnaire

The Student Questionnaire items, totaling thirty-three items, were identical to those developed by earlier researchers. Twenty-six items for the student questionnaire were taken directly or adapted from Friesen's[48] High School Student Values Inventory. Three items were added by Cathcart from the Saskatchewan High School Study by Knill,[49] who also added four more items, two of his own and two taken from Coleman's[50] questionnaire. This instrument can be found in Appendix C.

Fourteen of these thirty-three items were used to test hypotheses 3, 4 and 5 of this study.

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[48] David Friesen, "High School Student Values Inventory (Revised Edition)" (Edmonton: University of Alberta, 1966). (Mimeographed.)

[49] Knill, op. cit.

[50] Coleman, op. cit., pp. 338-364.

Teacher Questionnaire

The items for the Teacher Questionnaire were obtained from the same sources as the items used in the Student Questionnaire. Eleven items which were concerned with personal and professional information were taken from the questionnaire designed by Cathcart and became an integral part of the instrument used in this study.

The data collected with the Teacher Questionnaire were used to examine hypotheses 3 and 5. This instrument can be found in Appendix D.

RESEARCH PROCEDURES

Population and Sample

The population from which the respondents were drawn consisted of 2,056 students and 104 teachers. Selection of respondents was done by the principal after the researcher had indicated verbally at a special meeting what the criteria for selection were and formalized this in a follow-up letter.[51] The total number of respondents was eighty-one: forty-four students and thirty-seven teachers.

Schools Selected

All the high schools in the County of Leduc partici-

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[51] Appendix F, Directions to All High School Principals.

pated in the study; five were junior-senior high schools, and one offered only high school grades.

With one exception all schools were small rural high schools with enrolment at the high school level from 100 to 150 students. One school offered grades 10, 11 and 12, but its enrolment of 292 classified it as a small urben[52] school.

Data Collection

The "New Teacher" list, which refers to all teachers and not just those new to staff, was used to select volunteers--the teacher respondents. Similarly, students were asked to volunteer--the student respondents--and, along with staff members, the instruments were given to them in the fall term.

In order to collect the necessary data for the student each cooperating principal asked students and teachers to serve as "volunteers" for the research. To each volunteer the principal administered the Student Questionnaire or the Teacher Questionnaire. When each group completed their questionnaires, they were returned to the principal who, in turn, returned them in a sealed envelope to the researcher.

Data presented in Table II show that the students and

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[52] "Urban" is here defined as any centre having fifteen hundred people per square mile. The town in this study had a total population of three thousand.

TABLE II

DISTRIBUTION OF SCORES ON THE GOUGH HOME INDEX SCALE AND DVI FOR EACH SCHOOL FOR STUDENTS AND TEACHERS

School		-2 S.D.		-1 S.D.		+1 S.D.		+2 S.D.		Means		
											DVI	
		Gough	DVI	Gough	DVI	Gough	DVI	Gough	DVI	Gough	Student	Teacher
West #1	7	2	17,34	2	22,33	2	11,34	1	29	8.42	24.28	27.2
West #2	5	1	38	1	16	3	20,21,23	--	--	9.0	23.6	35.0
West #3	6	1	38	2	29,33	2	28,36	1	30	9.83	32.33	36.0
East #1	7	1	35	1	31	4	23,26 33,35	1	35	10.42	31.14	24.33
East #2	4	--	--	2	23,20	1	26	1	37	10.0	29.0	25.75
Central	15	2	19.26	5	27,36,38 38,40	5	9,25,32 45,45	3	21,31 48	9.6	32.0	28.16
Total No. of Students	44	7	207	13	376	17	472	7	231			
$\overline{X}$			29.55		28.92		27.76		33.0	9.545	28.725	29.24

		Gough	DVI Student	DVI Teacher
Range	Students	3-17	9-48	
	Teachers	--		9-45
$\overline{X}$	Students	9.545	29.321	
	Teachers	--		
S.D.	Students	3.558	9.057	
	Teachers	--		

teachers were not much different on their DVI scores; students' mean score was 28.7 and teachers' mean score was 29.2. Table VI, p. 62, shows length of teaching experience and locale of teacher respondents.

Other data in this table indicate the distribution of scores on the Gough Home Index Scale and the DVI for each school and the participants of those schools.

Method of Analysis

The collected data were punched on 80-column IBM cards and verified for computer analysis. The program used for the computer analysis of the t-test was a fortran program (t-100) and for the computer analysis of the chi-square test (CROS-2) a fortran cross-tabulation program was used.

Hypothesis 1 regarding the difference between students and teachers was analyzed by means of t-tests. Because the sample size of each group were nearly equal, forty-four students and thirty-seven teachers, no check on homogeneity of variance was used.

Hypothesis 2 was analyzed by examination of the various cells in Table II. These cells show both the distribution of the Gough Home Index Scale and the same students' DVI scores.

Hypotheses 3, 4 and 5 were analyzed by means of the chi-square (χ^2) test. When the cell frequencies were 5 or

less, the data were combined into a 2 x 2 table and phi coefficients were calculated. The chi-square (χ^2) test gives a measure of the strength of the relationship, while phi (Φ) is limited to four-fold point analysis and gives the size of the relationship expressed in terms of extremes of -1 (perfect negative correlation) to +1 (perfect positive correlation). Person's C converts the χ^2 measure of relationship to scale from 0 to 1 (no relationship to perfect relationship).

Summary

This study had five hypotheses, four of which were subjected to computer analysis (hypotheses 1, 3, 4 and 5) and two of which were replications of a previous study completed by Cathcart (hypotheses 1 and 2), but used a rural population from which participants were drawn.

There were six high schools involved in the study having a total of 2,056 students and 104 teachers enrolled. From this population, 44 student respondents and 37 teacher respondents cooperated in answering questionnaires.

The study was concerned about student and teacher held values and with determining whether a significant difference existed between the two groups using variables which it was hoped would relate closely to student held values as well as teacher held values.

In addition, students' economic status was considered through use of the Gough Home Index Scale and compared with their values as described by the scores on the DVI.

It was found that no significant correlation existed between students and teachers for the variables selected.

CHAPTER IV

RESULTS OF THE STUDY

In the previous chapter the hypotheses established for the research were discussed as well as the instruments that were used, the sample selected, and the schools involved in the investigation. This chapter presents the analysis of data collected with the research instruments, the DVI, the Gough Home Index Scale and the test of hypotheses related to these instruments.

Table II was designed to present pertinent information for each school. Other tables were designed to examine two dimensions of teacher education and training: Table VI, Experience in the County Related to DVI Score (by school), and Table VII, Years of Training Related to DVI.

Analysis of the Scales

Verification of reliability and validity of both the Gough Home Index Scale and the DVI have been reported in Chapter III (pp. 31-33). Figure 2 (p. 42) and data in Table II (p. 37) support the notions that the distribution by range and central tendency approximate those of Cathcart's study.

Because students and teachers were compared on Hypotheses 1 and 3, Figure 3 shows the distribution for both

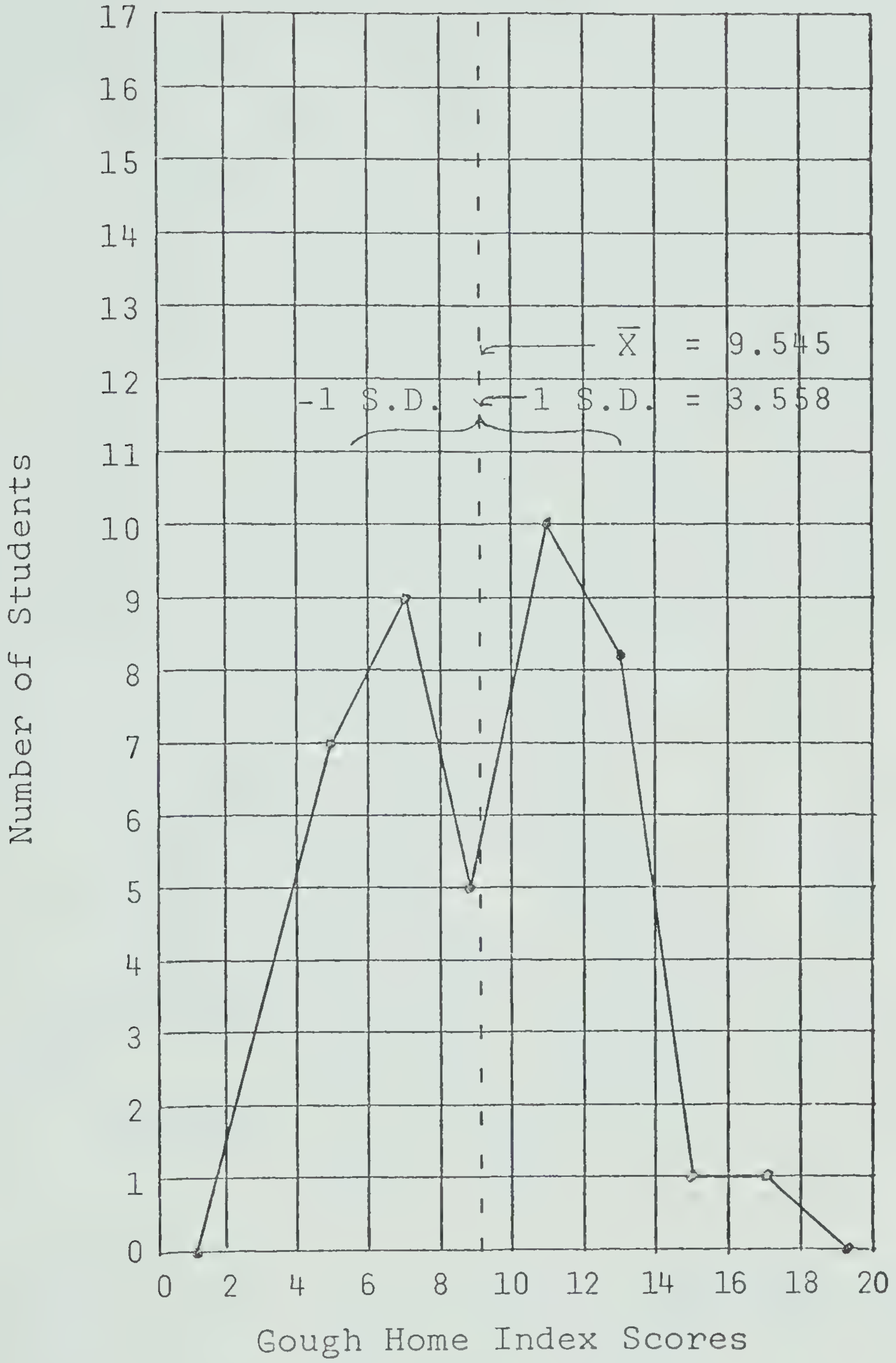
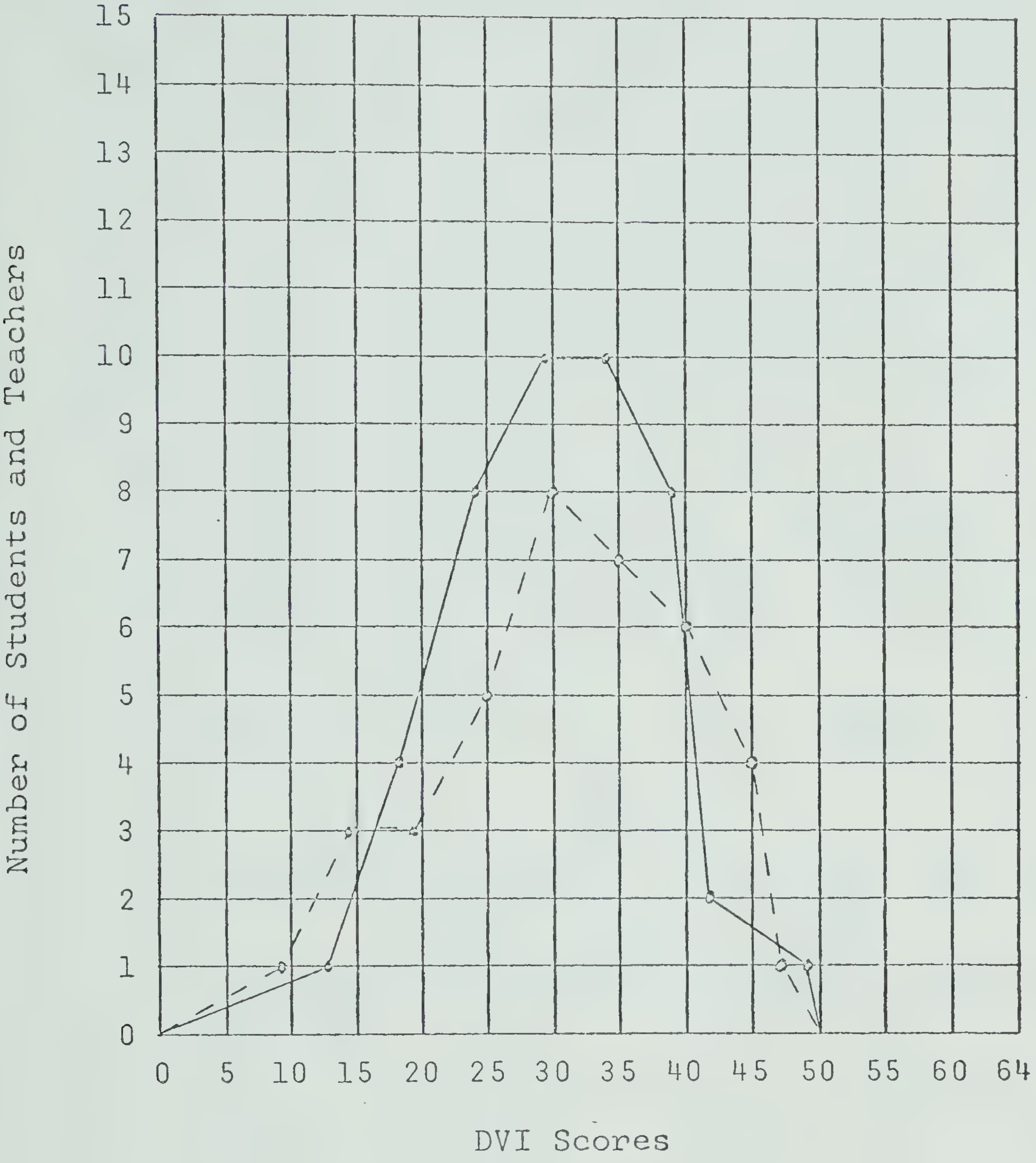


FIGURE 2

FREQUENCY POLYGON OF STUDENT SCORES

ON THE GOUGH HOME INDEX SCALE



Students ———— N = 45, $\overline{X}$ = 29.45, S.D. = 8.62

Teachers – – – – N = 37 , $\overline{X}$ = 29.16, S.D. = 9.55

FIGURE 3

FREQUENCY POLYGONS OF STUDENT

AND TEACHER SCORES ON THE DVI

of these groups on the same polygon. Data from Table II indicate the range of the student group (9-48) and the range of the teacher group (9-46). The computed means for each group were students 29.45 and teachers 29.16. The respective computed standard deviations were 8.62 and 9.55. The t-test results show no significant difference of means for either the total DVI scores or for any of the subscales of this instrument. Checks on this analysis were made using the f-test for differences between variances and Welch's T Prime test for population variances. Both these statistical checks failed to uncover significant differences in results and thus supported the t-test results.

TABLE III

STATISTICAL COMPARISON: GOUGH HOME INDEX SCALE AND TWO STUDIES IN ALBERTA

Researcher	N	$\overline{X}$	S.D.	R
Cathcart	709	10.09	3.54	1-19
Lavers	45	9.55	3.56	3-17

Analysis of Hypothesis 1

Hypothesis 1 stated that there is no significant difference between the student means on the DVI and the teacher means on the DVI.

No significant difference appeared for the total or in any of the subscale results of the DVI. Corrections to take into account sampling problems were taken through the method of computer analysis.[53]

Data from Figure 3 indicate that teachers were differentiated on their scores within their own group, but as a group did not deviate statistically from the student group. However, the fact that a group of eleven teachers were near or beyond one standard deviation on the emergent end of the continuum and were counter-balanced by another group of eleven who were at or beyond one standard deviation on the traditional end would seem to indicate the existence of two distinct viewpoints among teachers. A comparison of the polygons for students and teachers indicates that no dichotomy existed in the student group as it did in the teacher group. On the basis of the analysis of the collected data, the null hypothesis cannot be accepted or rejected.

Analysis of Hypothesis 2

Hypothesis 2 stated that there is no significant difference between the high socio-economic class student means on the DVI and the low socio-economic class student means on the DVI.

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[53] Chapter III, Method of Analysis, p. 38.

Analysis of data in Table II (p. 37) show that those students who were plus or minus two standard deviations away from the mean on the Gough Home Index Scale scored at or above the student mean or the group mean of the DVI for students and teachers. This finding places these deviant groups in the same area of the traditional-emergent continuum, but more toward the traditional end of that continuum.

The students in the study closest to the mean on the Gough Home Index Scale scored lower on the DVI than their fellow students at the economic extremes, which placed them at the emergent end of the continuum. However, since all the DVI means for both extreme and center groups on the Gough Home Index Scale were well within one standard deviation, plus or minus, any conclusion from these data would have to be supported by further research and analysis.[54] Therefore, the null hypothesis is not rejected.

Fourteen Variables Chosen

These variables, selected from the student and teacher questionnaires, were:

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[54] Cathcart found that the poorer student was traditional; Friesen found that higher economic status students in the city tended to score higher on the traditional-emergent continuum and that lower class students were more emergent.

Question Numbers	Variables
1, 2	Membership and church attendance
3, 4	Television viewing time and type of programs
5	Movie viewing time
6, 7	Number of activities in and out of school
8, 9	Life choices and sources of concern
10	School leaving
11, 12, 13	Work-success ethic; qualities needed, relation to money and responsibility
14	Personal reputation

The rationale for choosing these particular variables were: (1) to counter-balance the negative results obtained by other researchers with regard to student-student differences on the Gough Home Index Scale and student-teacher differences on the DVI; (2) to offset criticism levied by researchers in the field of values that the DVI does not get at student values which may account for the apparent absence of difference between students and teachers; and (3) to determine if such things as church membership, activities in and out of school and the importance of work might yield substantially different results because of the nature of the communities and homes of the student participants.

The fourteen variables chosen are presented in Table IV, p. 49. The numbers to the right indicate the number of question on student and teacher questionnaires.

Analysis of Hypothesis 3

Hypothesis 3 states that there is no significant difference between students and teachers for any of the fourteen selected variables taken from the DVI.

The results are as follows:

1. Church membership--79.1 per cent of the students belonged and 67.6 per cent of the teachers, but this did not prove the groups significantly different (.05 level) on this variable.

2. Church attendance--teachers were divided into three groups: 37.8 per cent attended regularly, 35.1 per cent attended occasionally, and 27.0 per cent did not attend at all. This proved significantly different at the .001 level since 10.9 per cent of students attended church regularly and 67.4 per cent did not attend church at all. Only 11 per cent of the students attended church on a casual basis; 33 per cent of the teachers said that they attended church on a casual basis.

TABLE IV

VARIABLES AND QUESTION NUMBERS FROM THE QUESTIONNAIRE--FOR DVI ITEMS

No.	Variable	Question Number	
		Student	Teacher
1.	Membership in a church	9	6
2.	Attends church regularly	10	7
3.	T.V. viewing time week days	15	12
4.	T.V.--favorite type of program	16	13
5.	How often at the movies	13	16
6.	Number of activities in school	4	22
7.	Number of activities outside school	5	21
8.	Life choice of importance	20	18
9.	Sources of concern	24	17
10.	Leaving school (or teaching)	18	14
11.	Things needed for success	27	19
12.	Money and the importance of work	51	23
13.	Responsibility and the importance of work	52	24
14.	Importance of reputation	53	25

3. T.V. viewing on week days--teachers and students did not vary significantly on this dimension; 32.4 per cent of the teachers claimed that they did not watch television on week days; 22.7 per cent of the student sample made a similar claim. There was a small group of students, 9.1 per cent, who watched three or more hours of T.V. per week compared with 2.7 per cent of the teachers who made the same statement.

4. Favorite programs on T.V.--there was a highly significant difference (.001) in what teachers and students watched on T.V. Comedy was favored by 56.8 per cent of the students while 29.3 per cent of the teachers chose the same type of program. Sports were of interest to both groups; these kinds of programs were watched by 15.9 per cent of the student sample; however, 21.6 per cent of the teacher sample watched a sports telecast. Of the students sampled 6.8 per cent expressed interest in interviews as a first choice while 43.2 per cent of the teachers indicated they preferred interviews to other programs.

In view of the recent advent of educational television for this area a comparison of the viewing habits of teachers and students (Figure 4) as well as "content" for commercially televised programs (Figure 5) is included.

While an exact comparison is not possible, it is obvious that teachers, at least in one rural county of

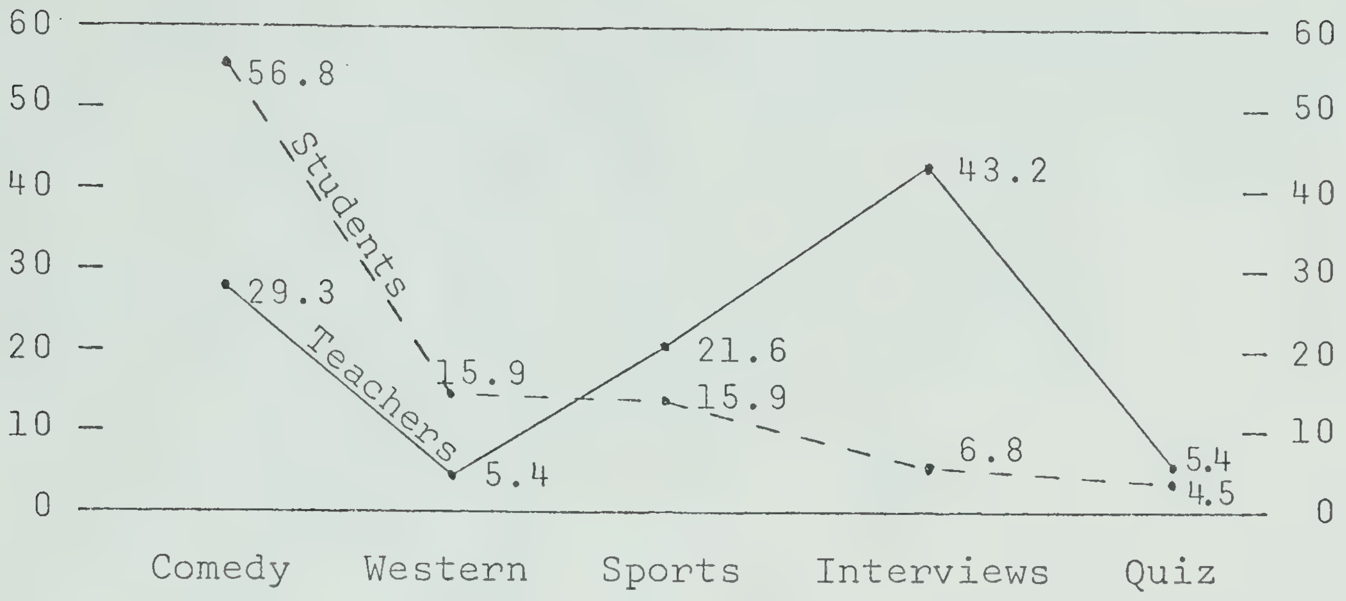

FIGURE 4

STUDENTS' AND TEACHERS' T.V. VIEWING HABITS

Alberta, pattern their viewing along the lines of educational television, while the students' pattern is very much like the commercial broadcast content pattern established elsewhere. (See Figure 5.)

Data in Figure 4 show that students and teachers share a liking for light entertainment and do not view quiz programs made available to them. These data also indicate that students and teachers view sports programs with teachers spending more time viewing these programs than students.

5. Going to the movies--of the forty-four students who participated, 47.7 per cent agreed that they attended a movie at least once a month, while 48.6 per cent of the teachers said they attended movies once a month. A somewhat larger group of students, 15.9 per cent, indicated that they

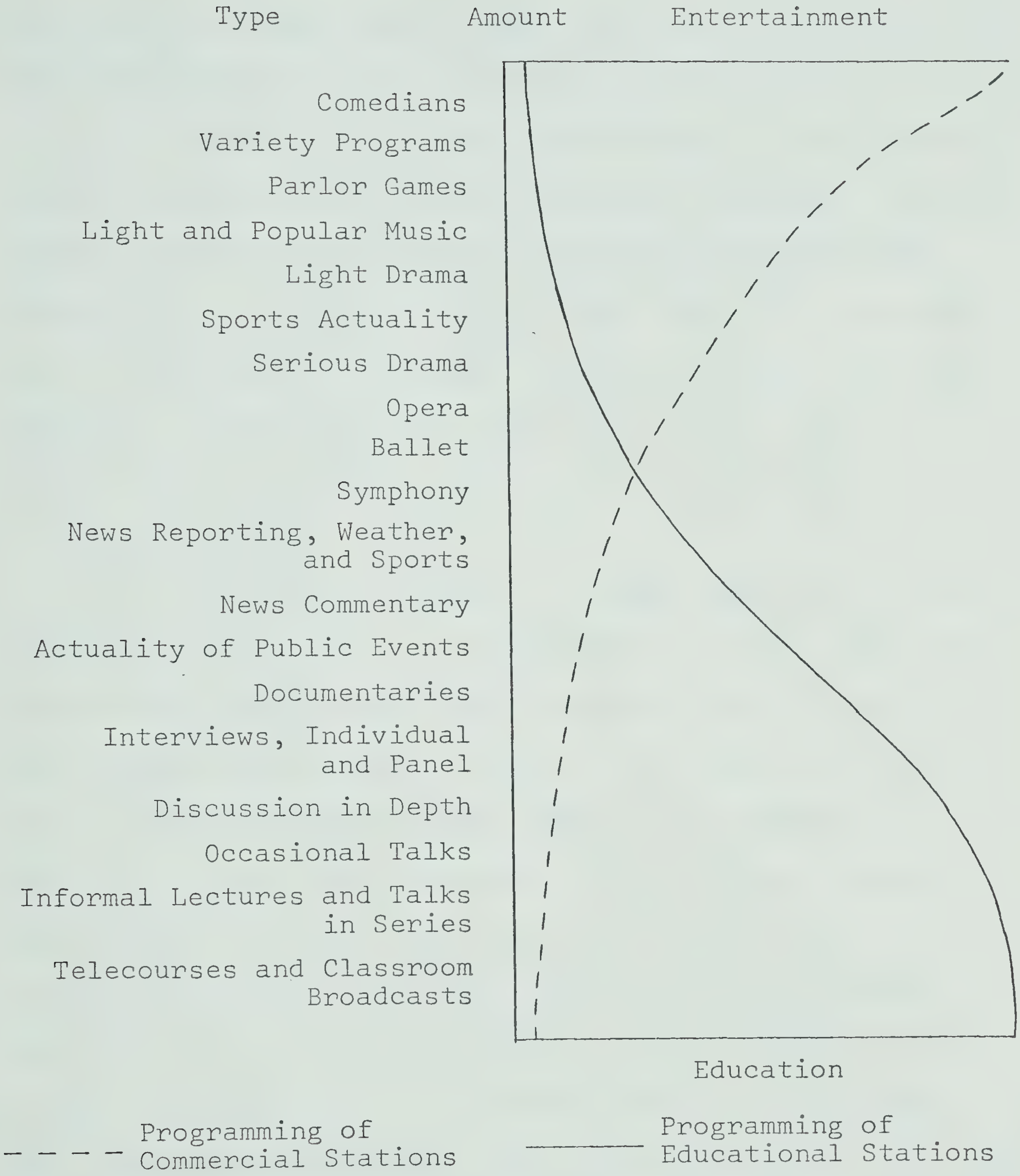

FIGURE 5

UNITED STATES PROGRAMS

saw a movie at least once a week. The number of teachers who indicated weekly movie attendance was a much lower 5.4 per cent.

6. Number of in-school activities--on this variable teachers and students showed a remarkable degree of consistency, and therefore there was no significant difference between the two groups. Only 8.1 per cent of the teachers and 9.1 per cent of the students had no in-school activity. However, in-school functions kept 13.6 per cent of the students and 13.6 per cent of the teachers busy with three or more activities.

7. Activities outside the school--there is a significant difference (actual significant difference was .005) between the teachers and the students on this variable. Nineteen and four-tenths per cent of the teachers have four or more activities, while none of the students reported this kind of involvement in activities outside the school. Only 13.9 per cent of the teachers had no outside activities, while 29.5 per cent of the students made this statement. The group of students reporting no outside activities had a mean score of 7.53 on the Gough Home Index Scale, which puts them below the 8.0 cut-off point established by Gough, and well below the mean of the total group of students (9.55). However, four of the group of students reported who had no outside activities had Gough Home Index Scale scores above the mean of 9.55. From this

datum it can be assumed that this middle-class group do not participate in the activities offered in their community, nor do they bear much resemblance socially to the lower-class group.

8. Life choice of importance--students and teachers were asked to choose between wealth, education, fame and faith. As a total group students and teachers ranked wealth first in order of importance (35.8 per cent). Thirty-eight per cent of the students placed wealth first while 32.4 per cent of the teachers thought wealth was important. Education was chosen by 29.6 per cent of the total group. Forty and five-tenths per cent of the teacher group chose education first, and 20.5 per cent of the student group listed education as their first choice.

The total percentage of students and teachers making the first two choices was 65.4 per cent, with teachers as a group totaling 72.9 per cent and students 59.1 per cent.

9. Sources of concern--the respondents were asked to express their concern in terms of health, academic success, acceptance by friends and "others." The two groups were not significantly different and, as with other variables, showed remarkable consistency and similarity of response. Teachers were less concerned about friendship and more concerned about "other problems," but both groups were concerned with academic success as revealed by these percentages: 32.6 per

cent of students, 36.1 per cent of teachers.

10. Leaving school (or teaching)--of the teacher sample 64.9 per cent had contemplated leaving teaching, while 9.1 per cent of the students stated they had contemplated leaving school.

The fact that many teachers contemplated leaving teaching would seem to indicate that they do not value education from their vantage point any more than students. Also, that few students plan to leave school may indicate the practical or other powerful value they attach to education.

11. Things needed for success-student and teacher participants were asked to indicate whether they thought possession of money, athletic prowess, personality, academic achievement or friendliness was the most important characteristic needed for success. Table V indicates these results. The high total for the combination of personality and friendliness, whether or not construed as the same by both groups, would indicate that while the school is an academic institution the participants in this study recognized the need for development of an effective personality as a future measure of success.

12. Money and the importance of work--this is the first of three vignettes to which the sample responded. The groups were asked what they would do if they suddenly found

TABLE V

"THINGS NEEDED FOR SUCCESS . . ."

Group	Item				
	Money	Athletics	Personality	Academic	Friendliness
Students	2.3	2.2	59.1	20.5	15.9
Teachers	10.8	2.7	51.4	21.6	13.5

themselves very affluent and with no real need to work. The significance level for this variable was .004. Far more students (70.5 per cent of the sample) than teachers (40.0 per cent)[55] suggested that they would continue to work even though independently wealthy. There might be two reasons for this: (a) the interactive effect--students saying what they are expected to say; and (b) these students are future-time oriented. Only 18.2 per cent of the students identified in any way with the person in the vignette who would begin to lead his own life immediately upon becoming wealthy. Fifty-one and four-tenths per cent of the teachers felt that their life would change immediately because of sudden wealth.

13. Responsibility and the importance of work--the second vignette had to do with accepting responsibility for a job, teaching or going to school, regardless of the fact

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[55] See Appendix G, Section G.1., p. 104.

that the individual intended to quit. A significant difference was found between the two groups for this variable (.036). Neither students nor teachers felt that they should give up entirely, although 51.4 per cent of the teachers felt obligated to continue work. Only 25.0 per cent of the students held a similar position. The difference between the two groups lies in the fact that students were less sure of their commitment to attend school than the teachers were of their commitment to teach. Fifteen per cent of the students did not know what they would do if this situation arose.

14. Importance of personal reputation--the third vignette had to do with reputation and what decision was important to the individual regarding acceptance by others because of his reputation. Analysis of the responses to questions indicated that teachers were more indecisive than students. In fact, there were two groups of pupils and teachers so far as response to this critical question was concerned. Of the forty-four students who participated, 33.0 per cent were concerned about their reputation, and 19.0 per cent of the teachers felt it was important that they guard their reputations. However, 20.3 per cent of students and 19.0 per cent of teachers felt the opposite, that they had to lead their own lives.

For the following variables in the analysis of Hypothesis 3 the null hypothesis was not rejected:

1. Church membership,
3. T.V. viewing on week days,
5. Going to the movies,
6. Number of in-school activities,
8. Life choice of importance,
9. Sources of concern,
11. Things needed for success, and
14. Importance of personal reputation.

Significant differences were found, and therefore the null hypothesis was rejected for:

2. Attends church regularly,
4. T.V. favorite type of program,
7. Number of activities outside school,
10. Leaving school (or teaching),
12. Money and the importance of work, and
13. Responsibility and the importance of work.

Analysis of Hypothesis 4

Hypothesis 4 stated that there was no significant difference between female and male students for any of the fourteen selected variables.

The results were as follows:

1. Church membership--no significant difference was

found between female and male students.

2. Church attendance--a significant difference (.01 level of significance) was found between girls and boys for this variable with the girls attending church regularly.

3. T.V. viewing on week days--no significant difference between girls and boys was found on this dimension.

4. Favorite programs on T.V.--no significant difference was found between female and male students.

5. Going to movies--a highly significant difference (.005 level of significance) was found between girls and boys, with the girls rarely attending movies during the week.

No significant difference was found between girls and boys on the following variables:

6. Number of in-school activities,
7. Activities outside the school,
8. Life choice of importance,
9. Sources of concern,
10. Leaving school (or teaching),
11. Things needed for success,
12. Money and the importance of work,
13. Responsibility and the importance of work, and
14. Importance of personal reputation.

Therefore, on the basis of these data, it is not possible to reject the null hypothesis that there is no significant difference between female and male students for the

variables listed above. That is, with the exception of variables concerned with "church attendance" and "going to movies," for these variables the null hypothesis is accepted.

Analysis of Hypothesis 5

Hypothesis 5 stated that there is no significant difference between female and male teachers for any of the selected variables.

From the analyzed data it was found that there was no significant difference between female and male teachers among the following variables:

1. Church membership,
2. Church attendance,
3. T.V. viewing on week days,
5. Going to movies,
6. Number of in-school activities,
7. Activities outside the school,
8. Life choice of importance,
9. Sources of concern,
10. Leaving school (or teaching),
11. Things needed for success,
12. Money and the importance of work,
13. Responsibility and the importance of work, and
14. Importance of personal reputation.

Therefore, on the basis of information gained, the

null hypothesis cannot be rejected regarding any of the fourteen variables tested in this hypothesis.

Analysis of data indicated that for variable 4, "Favorite programs on T.V.," there was no significant difference found. However, there was some significant difference found (.055 level) on the choice of programs. Men preferred sports and westerns (10.5 per cent); women teachers, comedies and quiz shows. However, the largest group of teachers, both sexes combined (43.2 per cent), agreed that interviews and news were their most important viewing.

An attempt has been made to better assess the teacher position in terms of traditional or emergent value orientation through two summary tables. Table VI equates years of experience in the county with DVI score and Table VII takes years of training as the variable compared to the DVI.

Three cell frequencies in Table VI are too small from which to draw conclusions (1 year, 7-8 years, 16-20 years of experience), but even combined cell frequencies do not show a consistently high or low variation on DVI scores below the mean of 29.24 (Table II, p. 37).

Data from Table VII show that teachers with two years of preparation had the most traditional DVI scores. But, again, combining cell frequencies or categories creating larger cell frequencies showed the ubiquitous tendency toward the mean rather than measurable differences in the teacher

TABLE VI

YEARS OF EXPERIENCE IN COUNTY (TEACHERS) AND DVI SCORES

School #	1 Year	2 Years	3-4 Years	5-6 Years	7-8 Years	9-10 Years	11-15 Years	15-20 Years	21+ Years	Total	N	$\overline{X}$
West #1	--	36*	27,28	9	36	--	--	--	--	136	5	27.2
West #2	--	--	31,38 43	--	--	--	28	--	--	140	4	35.0
West #3	--	41	--	27,38	--	--	35	33	42	216	6	36.0
East #1	21,31	18,34	--	26	--	--	16	--	--	146	6	24.3
East #2	--	--	24,36	32	--	--	--	--	11	103	4	25.7
Central	--	23	39,44	12,28	29	--	18,32	--	13,25 29,46	338	12	28.2
Total	52	152	310	172	65	--	129	33	166			
N	2	5	9	7	2	--	5	1	6	37		
$\overline{X}$	26.0	30.4	34.4	24.4	32.5	--	25.8	33.0	27.7			

*DVI Score.

TABLE VII

YEARS OF TEACHER EDUCATION AND DVI SCORES

School #	1 Year	2 Years	3 Years	4 Years	5+ Years	Total	N	$\bar{X}$
West #1	--	36*	27,*28	9	36	136	5	27.2
West #2	--	--	31,38	28,43	--	140	4	35.0
West #3	--	--	--	35,38,41	27,33,42	216	6	36.0
East #1	--	--	18,21	26,31,34	16	146	6	24.3
East #2	32	36	24	11	--	103	4	25.7
Central	23	--	28,32,44	18,25,29 29,39	12,13,46	338	12	28.2
Total	55	72	291	436	225	1,079		
N	2	2	10	15	8		37	
$\bar{X}$	27.5	36.0	29.1	29.1	28.1			

*DVI Score.

$\bar{X}$ = 29.321, S.D. = 9.057 (computed).

group.

It would seem then that two generalizations are possible from these data concerning the teaching force involved in the research:

1. There is no significant relationship between years of experience, teaching in the county, years of teacher education, or school location of the respondent and the scores made on the DVI.

2. Teachers' responses to variables presented on the questionnaires are highly individual and do not indicate differences from school to school which might be construed as systemic or related to other factors tested such as age, sex, or total teaching experience.

Summary

The examination of pupil-teacher differences relative to the selected variables and to each other failed to uncover major differences. Both groups were consistent in their assessment of the importance attached to the variables and this included differences which might have developed through sex differences.

This teacher and student sample had more similarities than differences. Finding in this study of significant differences between students and teachers regarding church attendance, favorite T.V. programs and the problem of leaving

school or teaching were noted. However, no significant difference could be found between student and teacher groups regarding their weekly T.V. viewing habits nor how often they went to the movies.

This study found that teachers were extremely busy with outside school activities. There was also a significant difference between the two groups on how they would react to sudden financial independence. Students were more inclined to maintain their present roles than teachers. There was also a significant difference between students and teachers regarding the importance of working at a job that they disliked. Students, understandably, felt less commitment to school than teachers did to a job for which they were being paid.

Hypothesis 2, concerning the absence of differences in values between high and low socio-economic students, was confirmed. Hypothesis 1, which was concerned with whether students and teachers differed significantly on their DVI scores, gave results showing that students and teachers did not differ significantly in their values as measured by the DVI.

The generalization that students and teachers in the rural county being investigated do not differ appreciably in their values is substantiated.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

Summary and Conclusions

This study had as its major question the identification and interrelationship of some of the values held by high school students and their teachers in a rural area.

A second question studied was the social and personal correlates that existed within the student and teacher groups. The student's economic status was examined and related to his score on the DVI, and teachers' locale and experience in the county as well as their years of training were related to their DVI scores.

Significant differences were not obtained between the various groups tested. Values, as determined by the gross scores on the DVI, did not show significant differences between students and teachers, between female and male students or between female and male teachers. Some of the subscales of the DVI gave indications that students were more achievement oriented than teachers, and that these same students tended to be more traditional than emergent in their values, i.e., future-time oriented.

On a few of the selected variables there was a significant difference (.05 level of significance) between students and teachers, television viewing habits being the main

discriminator in the value system of the two groups. Teachers were interested in learning from television; students, with the exception of the most traditional, were primarily interested in being entertained.

Teachers also attended church more often and more consistently, although nominal membership for both groups was nearly the same. Only 10 per cent of the students were consistent church-goers. In all of the other variables selected there was little difference between teachers and students.

Students' sense of values did not vary appreciably with their economic status. Both those who scored very low on the Gough Home Index Scale and the students near or above the mean, 9.5 out of a possible 20, valued education and showed a traditional value pattern to the same degree as their more affluent classmates.

Neither the teachers' locale in the county, their academic background, nor their time in the county had any connection with their value pattern.

Very little in this study would tend to verify the predication of Spindler that there is a shift in values in American society from the traditional to the emergent. Nor is Coleman's thesis about the values of students being emergent or present-time oriented verified in any degree. In fact, students and teachers resemble each other and the

traditional value patterns more than the students resemble their urban counterparts, either American or Canadian.

Major findings. The major problem concerned the notion of the difference predicated to exist between students and teachers as to their value system. The means of students and teachers were not significantly different, nor were the subproblems analyses able to uncover significant differences over the fourteen variables established for this investigation. The absence of significant differences may be attributed, in part, to the size of the respondent group used, or to the kind of instruments used. The same instrument administered to larger samples might elicit more meaningful results.

Subproblem 1 was concerned with the differences in values held by students and teachers and with the values held by high and low socio-economic class students.

No significant differences occurred on any of the subscales of the DVI, nor was there any overall significant difference between high and low socio-economic class students.

The absence of difference of scores for the DVI made the placing of students and teachers on different points of the traditional-emergent continuum unwarranted. In fact, the two groups showed almost identical means of 29.45 for students and 29.16 for teachers.

Subproblem 2 dealt with variables that might reveal differences between students and teachers. Variables were selected which might get at student held values and on which students might have divergent views or habits, reflecting differences in values, from the teachers.

Differences were found regarding church attendance, with only 10.9 per cent of the students in regular attendance while 37.8 per cent of the teachers were committed to this value. Teachers varied from students in their television program choice. Greater emphasis was placed by them on actuality broadcasts, including sports, interviews and news. Students view T.V. for entertainment; most teachers, for information. The teachers in this sample were found to be exceptionally busy outside the school, much more so than the students. On the other hand, the teachers' commitment to the school was substantially less than the students', 91 per cent of whom were in favor of remaining in school while 65 per cent of the teachers had contemplated leaving the school situation. The teachers also had less problem in deciding to abandon teaching if they became affluent. Students who were unhappy in the school situation and planned to quit did not show the same commitment to school as teachers who indicated that they were considering terminating their connection with the school, but in all the other situations (variables) presented the students were as

traditional as the teachers.

Subproblem 3 attempted to assess student differences on the same variables based on the sex of the individuals. Teacher respondents were also divided by sex and an analysis of the questionnaires made.

Female students varied in their habits from male students in that they attended church more regularly and went to fewer movies. In all other variables they were remarkably similar to their male peers in what they valued.

Both female and male teachers showed even less variation. T.V. program choice was the only significantly different factor. Male teachers tended to watch a greater variety of programs than the female teachers, but there remained general agreement in the teacher group on the value of interview and news type of programs.

Conclusions. Students in this investigation value education and, if the variables can be assumed to have measured their decision-making accurately, they are prepared to make sacrifices for it. In fact, their commitment to education is substantially greater than the teachers', a large group of whom tend to view teaching as not so much a way of life as an obligation and an income. Students in this study are traditional and achievement oriented and are not measurably different from teachers in this regard. Therefore,

placing them at a different point on the Spindler continuum from the traditional teachers or at two substantially different locations cannot be justified. Teachers may well be placed at two locations, near the traditional students and the older teachers on Spindler's continuum, not perhaps on the usual criteria of experience or education, but on personal qualities which were not identified.

Implications

The lack of commitment by teachers and the presence of it in the students' value system is an interesting outcome of the study. The school administrator would be interested in the first; the guidance counsellor, as well, in the second. Since teachers have little influence on the students, parents and peer pressure concern them more; and since personality as well as academic excellence are paramount with the student, the gap between the two groups studied and the lack of influence by teachers may well rest with the teacher and through him the administration.

The rural student, particularly if he is reasonably affluent, is not as committed as he might be to academic excellence. In this he differs from his city counterpart.[56] Rural based students of lower economic status do value an

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[56] Friesen, The Urban Teenager, op. cit.

education and may well be overlooked by middle-class teachers, administrators or counsellors.

On a more philosophic plane, Coleman found that:

> Academic achievement was related to the student's self-concept, his control over his own fate [underlining mine] and his interest in school. These he concluded are the important factors not the size of or cost of classrooms, schools, teachers' salaries or curriculum construction.[57]

Perhaps the absence, on the part of the school, of allowing the poorer student to feel that he does control his own fate is an important consideration, whether he be rural or urban based.

Recommendations for Further Research

It is obvious that other measures of values plus cross-references with other variables and social constructs are necessary if the important study of what students value is to proceed. In-time studies plus test-retest types of experimental designs are necessary to adequately validate what is thought to be found initially.

Economic status may not, at this time and place, differentiate between emergent and traditional students. Characteristics of both, and society needs both, have been

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[57] James Coleman, *et. al.*, "Equality of Educational Opportunity" (Washington, D. C.: U. S. Government Printing Office, 1966) as reported in *The C. S. A. Bulletin*, Vol. VIII, No. 5, June, 1969.

identified here and in other studies. A study of what characteristics readily identify each of these types might be of value both to research and to the practicing profession.

A recommendation for a major study in this area might involve the Human Resources Research Council of the Province of Alberta. Replication of this study with a larger sample of teachers and students from the rural areas of the province would give information to determine if the values of the two groups differ significantly in a larger sample.

Confusion is evident regarding whether or not instruments used to measure student values also measure adequately or accurately those held by teachers. The theoretical problems of test construction and validation as well as action-research with new or evolved instruments is needed.

An underlying assumption, in fact well documented studies supporting the assumption, of teacher impotency regarding influence over the teen-age student exist. Whether the teacher should have this influence or not as a foundation of education is debatable. But there can be no serious debate about this issue on whether teachers can be held accountable to their society for the values of the students, until such time as we are very sure that the lack of teacher influence on values of secondary school students is not really a measure of the dysfunction of the whole system.

Studies are needed to determine which, if any, teachers influence secondary school students, to what degree and in what ways and, finally, whether or not the melding of teacher and student values is an important consideration for education. This melding may well be important for learning, but it may not be as valuable for the philosophy of life of the student.

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APPENDIXES

APPENDIX A

"I OUGHT TO . . ." QUESTIONNAIRE

INSTRUCTIONS

To insure that all information is strictly confidential please do NOT place your name on any of the questionnaires.

This questionnaire consists of a number of statements about things which you may think you ought or ought not to do and feel. These statements are arranged in pairs as in the examples below:

1. A . . be reliable.
   B . . be friendly.

2. A . . work on a project with others.
   B . . work on a project alone.

To help you make the required choice, when reading the item to yourself, precede each statement with the phrase, "I ought to . . . ." That is, in the examples given, you choose the item which is most desirable for you. If you feel that you ought to work on a project alone, you should circle the letter "B" opposite number 2 on the answer sheet as in the example below.

EXAMPLE:	Answer Sheet
2. A . . work on a project with others. B . . work on a project alone.	2. A B

If you feel more strongly about B than A then circle "B" on the answer sheet.

THIS IS NOT A TEST. You are merely asked to indicate your opinions and feelings regarding a variety of subjects. WORK RAPIDLY. <u>First impulses are important</u>. Please answer ALL questions.

Choose between statements A and B. Precede each statement with the phrase, "I ought to . . . ."

1. A . . work harder than most of those with a similar job.
   B . . work at least as hard as most of those with a similar job.

2. A . . do many things with other people.
   B . . do things which are out of the ordinary.

3. A . . have my own firm ideas about politics and religion.
   B . . allow the opinions of my friends and associates to influence my thinking on these matters.

4. A . . enjoy myself often by doing things with others.
   B . . seek satisfaction by doing many things on my own.

5. A . . attain a higher position than my father or mother attained.
   B . . enjoy more of the good things of life than my father and mother enjoyed.

6. A . . feel that since the future is uncertain I should take advantage of my present opportunities.
   B . . feel that the future holds more opportunities for me than the present.

7. A . . feel that happiness is the most important thing in life to me.
   B . . feel that enduring suffering and pain is important for me in the long run.

8. A . . obtain advice from others in making decisions.
   B . . be independent of others in making decisions.

9. A . . feel it is my duty to save as much money as I can.
   B . . feel that saving is good but not to the extent that I must deprive myself of all present enjoyment.

10. A . . put ten dollars in the bank.
    B . . spend five of the ten dollars enjoying myself with my friends.

11. A . . spend enough on clothes to dress as well as my friends and associates.
    B . . spend less on clothes in order to save for future needs.

12. A . . put in long hours of work without distraction.
B . . feel that I can't work long hours without distraction but I'll get the job done anyway.

13. A . . feel that it is most important to live for the future.
B . . feel that today is important and I should live each day to the fullest.

14. A . . feel that what is right for me may not be right for others.
B . . feel that I should be firm in my beliefs about what is right or wrong.

15. A . . work hard to do most things better than others.
B . . work hard at some things and leave others to those who are more qualified than I.

16. A . . feel that everybody misbehaves once in a while but the important thing is not to make the same mistake over again.
B . . feel that the most important thing in life is to strive for peace with God.

17. A . . feel that work should come before pleasure.
B . . feel that pleasure is necessary to develop the well-rounded individual.

18. A . . consider what others think when deciding about right and wrong.
B . . feel that my own convictions about right and wrong are all that really matter.

19. A . . defend my ideas about right and wrong.
B . . be willing to be convinced on matters of right and wrong because these terms have different meanings for different people.

20. A . . make as many social contacts as possible.
B . . be willing to sacrifice myself for a better world.

21. A . . get all my work done by my own efforts.
B . . get my work done with the help of others if I am allowed to.

22. A . . wear clothes similar to those of my friends.
B . . dress modestly even though this makes me different from my friends.

23. A . . work hard to earn enough money to enjoy some of the luxuries of life.
    B . . work hard at doing something original regardless of pay.

24. A . . get a job which will allow me to enjoy some of the luxuries of life.
    B . . work hard at doing something original regardless of pay.

25. A . . be able to solve difficult problems and puzzles.
    B . . feel that difficult problems and puzzles are good for some people but not for everybody.

26. A . . feel that style is more important than quality in clothes.
    B . . feel that quality is more important than style in clothes.

27. A . . say what I think is right about things.
    B . . be careful not to say things that will offend others.

28. A . . feel comfortable doing as well as most people with a similar job.
    B . . feel comfortable doing better than most others with a similar job.

29. A . . have strong personal feelings about correct behaviour.
    B . . feel that the group has the right to decide what kind of behaviour it will approve.

30. A . . feel that discipline in the family today is not as strict as it should be.
    B . . feel that change from strict discipline in today's family is a good one.

31. A . . feel that one of the primary things in life is to gain knowledge useful to me in the future.
    B . . feel that one of the primary things in life is to learn to get along with people.

32. A . . do things without regard to what others may think.
    B . . do things which allow me to have fun and be happy.

33. A . . register for an educational course which is very interesting to me, whether or not it will do me some good later on.
B . . register for an educational course which is uninteresting to me but which will do me some good later on.

34. A . . attend a First of July celebration to enjoy myself being with people.
B . . attend a First of July celebration because it is my duty to be loyal to my country.

35. A . . feel it is right to spend less for clothes in order to save for the future.
B . . feel that whether one wants to spend more on clothes and save less or vice versa is a matter of opinion.

36. A . . try to do original and creative things.
B . . share my ideas and work cooperatively with others.

37. A . . use expressions that are common among my friends and associates.
B . . use only correct expressions when I speak.

38. A . . feel that it is right to save for the future.
B . . feel that whether or not it is right to save for the future is up to the individual.

39. A . . choose a job with plenty of opportunities for advancement even though the pay isn't as high as I would like it to be.
B . . choose a job which I can work with many interesting people.

40. A . . mix in a little pleasure with my work so that I don't get bored.
B . . keep at a job until it is finished.

41. A . . get as much pleasure as I can out of life now.
B . . stand by my convictions.

42. A . . feel that everyone should be sociable even if it means occasional misbehaviour.
B . . feel guilty when I misbehave and expect to be punished.

43. A . . feel that children should obey decisions of their parents.
    B . . feel that children should be able to do many of the things their friends do.

44. A . . be very ambitious.
    B . . be very sociable.

45. A . . choose a job which will permit me to have as many luxuries as most of my friends.
    B . . choose a job which promises advancement even though the pay is lower than that of my friends.

46. A . . get the kind of job which will bring me in contact with many interesting people.
    B . . get the kind of job which will make me a success in life.

47. A . . feel that whether or not it is right to plan and save for the future is a matter of opinion.
    B . . feel that it is right to plan and save for the future.

48. A . . be willing to sacrifice myself for the sake of a better job.
    B . . feel it is important to behave like most other people do.

49. A . . deny myself enjoyment for the present for better things in the future.
    B . . have fun attending parties and being with people.

50. A . . be satisfied to do as well in life as my father did.
    B . . attain a higher position in life than my father attained.

51. A . . feel that it will be good for me later if I endure some unpleasant things now.
    B . . feel that whether or not I should be willing to endure unpleasant things now because it will be good for me later is a matter of opinion.

52. A . . be able to have most of the things my friends have.
    B . . be able to have enough money to lay away for future needs.

53. A . . feel that happiness is the most important thing in life.
B . . feel that being respected is the most important thing in life.

54. A . . feel that more "old-fashioned whippings" are needed today.
B . . feel that it is up to individual parents to decide whether or not the children should be whipped.

55. A . . exert every effort to be more successful this year than I was last year.
B . . be content with a reasonable amount of success and live longer.

56. A . . try very hard to overcome my emotions.
B . . get as much pleasure as I can out of life now.

57. A . . feel it is very important to be more successful this year than I was last year.
B . . feel it is more important to get along well with others.

58. A . . feel that what is sinful for one person may be acceptable for another.
B . . feel that I should avoid even the appearance of sin.

59. A . . spend as much time as I can in working independently.
B . . spend as much time as I can in having fun.

60. A . . deny myself enjoyment for the present for better things in the future.
B . . be able to have as much enjoyment as my friends have.

61. A . . feel that it is right to be very ambitious.
B . . feel that it may or may not be right to be very ambitious depending on the individual.

62. A . . choose to work with people I like in a job I don't like.
B . . choose to work with people I don't like in a job which I like.

63. A . . work as hard as I can in order to be successful.
B . . work as hard as I can in order to enjoy some of the luxuries of life.

64. A . . strive to be an expert at something.
B . . do many things well but not be an expert in anything.

PLEASE MAKE SURE YOU ANSWERED ALL QUESTIONS.

NOW GO ON TO THE NEXT SET OF QUESTIONS.

APPENDIX B

SCORING KEY FOR THE DVI

Value Scale	Items Representing the Scale
Work Success Ethic	1A, 5A, 12A, 15A, 24B, 25A, 40B, 44A, 46B, 50B, 55A, 57A, 61A, 62B, 63A, 64A.
Future-Time	6B, 9A, 10A, 11B, 13A, 31A, 33B, 35A, 38A, 39A, 45B, 47B, 49A, 51A, 52B, 60A.
Independence	2B, 3A, 4B, 8B, 18B, 19A, 21A, 22B, 23B, 27A, 38B, 29A, 32A, 36A, 41B, 59A.
Puritan Morality	7B, 14B, 16B, 17A, 20B, 26B, 30A, 34B, 37B, 42B, 43A, 48A, 53B, 54A, 56A, 58B.
Sociability	2A, 4A, 10B, 20A, 27B, 30B, 31B, 34A, 36B, 39B, 42A, 44B, 46A, 49B, 57B, 62A.
Present-Time	5B, 6A, 7A, 9B, 13B, 17B, 23A, 24A, 32B, 33A, 40A, 41A, 53A, 56B, 59B, 63B.
Conformity	1B, 3B, 11A, 18A, 22A, 26A, 28A, 37A, 43B, 45A, 48B, 50A, 52A, 55B, 60B, 64B.
Moral Relativism	8A, 12B, 14A, 15B, 16A, 19B, 21B, 25B, 29B, 35B, 36B, 47A, 51B, 54B, 58A, 61B.

APPENDIX C

STUDENT QUESTIONNAIRE

For each item below please select the response (A, B, C, etc.) that is most appropriate for you personally and place a circle over the letter corresponding to that response on the Student Questionnaire. Please do NOT place any marks on this questionnaire. Please work QUICKLY and answer ALL questions.

1. How old are you?
   A. 14 or younger
   B. 15
   C. 16
   D. 17
   E. 18 or over

2. What school grade are you in?
   A. ten
   B. eleven
   C. twelve

3. What is your sex?
   A. boy
   B. girl

4. In how many extra-curricular activities do you participate in school at the present time? (Example: school clubs, cheerleaders, school sports, students' union, etc.)
   A. none
   B. one
   C. two
   D. three
   E. four or more

5. In how many organized activities do you participate outside school? (Example: music lessons, swimming, hockey, etc.)
   A. none
   B. one
   C. two
   D. three
   E. four or more

6. How many brothers and sisters do you have?
   A. none
   B. one
   C. two
   D. three
   E. four or more

7. Do you date?
   A. no
   B. yes, about once a month
   C. yes, about once a week
   D. yes, about twice a week
   E. yes, more than twice a week

8. Do you go steady?
   A. yes
   B. no

9. Are you a member of a church?
A. yes
B. no

10. Do you attend Sunday School or Church School?
A. yes, regularly
B. yes, occasionally
C. no

11. How much time, on the average, do you spend doing homework outside school on a weekday?
A. none, or almost none
B. less than one hour
C. one to two hours
D. between two and three hours
E. three or more hours

12. How many subjects have you failed since starting grade nine?
A. none
B. one
C. two
D. three
E. four or more

13. How often do you go to movies?
A. never, or almost never
B. about once a month
C. about once a week
D. twice a week or more

14. What course are you taking now?
A. university entrance
B. general
C. commercial
D. vocational

15. About how much time, on the average, do you spend watching T.V. on a weekday?
A. none, or almost none
B. less than one hour
C. one or two hours
D. between two and three hours
E. three or more hours

16. Which one of the following is your favorite type of T.V. program?
A. western
B. quiz shows or contests
C. interviews or news
D. sports
E. comedy

17. After high school my plans for education are:
A. university
B. technical or vocational school
C. business college
D. nurses' training
E. no further education
F. other

18. If you had your choice, would you leave school before graduation?
A. yes
B. no

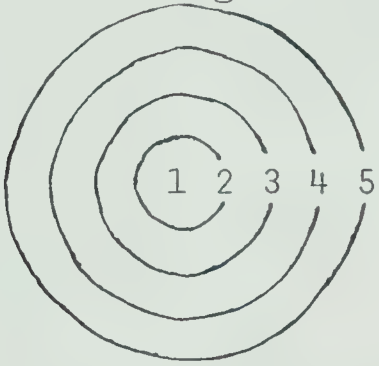
19. How far have you travelled on vacation? (Circle on the answer sheet as many as apply.)
A. outside North America
B. to the United States
C. to other provinces of Canada
D. have not travelled outside Alberta

20. If you could have only one of the following, which one would you choose?
    A. wealth
    B. education
    C. fame
    D. faith

21. If you could be remembered here at school for one of the things below, which one would you want it to be?
    A. outstanding student
    B. leader in activities or athletics
    C. most popular

22. Below is a list of items on which some parents have rules for their teenage children, while others don't. Circle each item that your parents have definite rules for.
    A. time for being in at night
    B. amount of dating
    C. against going steady
    D. time spent watching T.V.
    E. time spent on homework
    F. against going around with certain boys
    G. against going out with certain girls
    H. eating dinner with the family
    I. no rules for any of the above items

23. Suppose the circle below represented the activities that go on here at school. How far out from the center of things are you?



24. Which one of the following are you really worried about most?
    A. health
    B. academic success
    C. acceptance by friends
    D. others

25. How many evenings a week do you spend with the gang?
    A. none
    B. one
    C. two or more

26. Among the things you strive for during your high school days, which of the following is most important to you?
    A. pleasing your parents
    B. learning as much as possible in school
    C. living up to your religious ideals
    D. being accepted and liked by other students
    E. pleasing teachers

27. Which one of the following do you think is the most important characteristic necessary for success in life?
    A. money
    B. athletics
    C. personality
    D. academic achievement
    E. friendliness

28. Which one of these things would be hardest for you to take?
    A. parents' disapproval
    B. teachers' disapproval
    C. breaking with a friend

29. Does your mother have a job outside the home for which she receives wages?
    A. yes
    B. no

30. Do you have a part-time job now for which you get paid?
    A. yes
    B. no

31. Does your family own a car?
    A. yes
    B. no

32. Does your family have a garage or carport?
    A. yes
    B. no

33. Did your father go to high school?
    A. yes
    B. no

34. Did your mother go to high school?
    A. yes
    B. no

35. Did your father go to university?
    A. yes
    B. no

36. Did your mother go to university?
    A. yes
    B. no

37. Is there a writing desk in your home?
    A. yes
    B. no

38. Does your family have a stereo record player?
    A. yes
    B. no

39. Does your family own a piano?
    A. yes
    B. no

40. Does your family get a daily newspaper?
    A. yes
    B. no

41. Do you have your own room at home?
    A. yes
    B. no

42. Does your family own its own home?
    A. yes
    B. no

43. Is there an encyclopedia in your home?
    A. yes
    B. no

44. Does your family have more than 100 hard-covered books? (e.g., 4 shelves 3 feet long)
    A. yes
    B. no

45. Did your parents borrow any books from the library last year?
    A. yes
    B. no

46. Does your family leave town each year for a holiday?
    A. yes
    B. no

47. Do you belong to any club where you have to pay fees?
    A. yes
    B. no

48. Does your mother belong to any clubs or organizations such as study, church, art, or social clubs?
    A. yes
    B. no

49. Does your family own a color T.V. set?
    A. yes
    B. no

50. Have you ever had lessons in music, dancing, art, swimming, etc., outside school?
    A. yes
    B. no

Read the following three questions carefully. Two students are described in each question. If you had to compare yourself with one of these students, which one would you say you'd most nearly be like? If you find it impossible to decide, mark item "E" on the answer sheet.

51. Two students are talking about what they would do if they were suddenly to inherit enough money to allow them to live in luxury for the rest of their lives. The first student said that he would keep on with his education and then do some kind of work on a regular basis because he wouldn't feel right any other way. The second student said he wouldn't work regularly any more after he received the money, that he would spend most of his time doing all the things he'd always wanted to enjoy.
    A. very much like the first student
    B. somewhat like the first student
    C. very much like the second student
    D. somewhat like the second student
    E. impossible to decide.

52. Two students were attending the same high school. They both felt they couldn't get along with their teachers and they disliked the school very much. Both of them were planning to quit just as soon as they could find suitable jobs. The first student said that since things were so bad he wasn't going out of his way to work hard, that he was doing just enough to get by. The second student said that he was continuing to work as hard as he usually did, that he felt he should do a full day's work.
    A. very much like the first student
    B. somewhat like the first student
    C. very much like the second student
    D. somewhat like the second student
    E. impossible to decide

53. Two students were discussing their reputations in the school. The first student said he thought it was important for a person to watch what he does in public and to associate with a respectable class of people. The second student said he doesn't pay too much attention to what other people think of him, that he does what he wants to do and doesn't worry too much.
    A. very much like the first student
    B. somewhat like the first student
    C. very much like the second student
    D. somewhat like the second student
    E. impossible to decide

APPENDIX D

TEACHER QUESTIONNAIRE

For each item below please select the response (A, B, C, etc.) that is most appropriate for you personally and place a circle around the letter corresponding to that response on the answer sheet. Do NOT place any marks on this questionnaire. Please work QUICKLY and answer ALL questions.

1. How long have you taught in your present school, including this year?
   - A. one year
   - B. two years
   - C. three or four years
   - D. five or six years
   - E. seven or eight years
   - F. nine or ten years
   - G. eleven to fifteen years
   - H. sixteen to twenty years
   - I. twenty-one years or more

2. What is your total teaching experience including the time in your present school? (Include this year.)
   - A. one year
   - B. two years
   - C. three or four years
   - D. five or six years
   - E. seven or eight years
   - F. nine or ten years
   - G. eleven to fifteen years
   - H. sixteen to twenty years
   - I. twenty-one years or more

3. What is your sex?
   - A. male
   - B. female

4. What is your age?
   - A. 24 years or under
   - B. 25-29 years
   - C. 30-34 years
   - D. 35-40 years
   - E. 40-44 years
   - F. 45-49 years
   - G. 50-54 years
   - H. 55-59 years
   - I. 60 years or over

5. How many years of training do you have for salary purposes? (Do not count fractional years.)
   - A. one year
   - B. two years
   - C. three years
   - D. four years
   - E. five or more years

6. Are you a member of a church?
   - A. yes
   - B. no

7. Do you attend Sunday School or Church?
   - A. yes, regularly
   - B. yes, occasionally
   - C. no

8. What is your marital status?
   A. single
   B. married
   C. divorced or separated
   D. widow or widower

9. If you are married, how many children do you have?
   A. none
   B. one
   C. two
   D. three
   E. four or more

10. What route did you follow in your training?
    A. elementary education
    B. secondary education
    C. B.Ed. after another degree
    D. other

11. How far have you travelled on vacation? (Circle as many as apply.)
    A. outside North America
    B. to the United States
    C. to other provinces of Canada
    D. have not travelled outside Alberta

12. About how much time, on the average, do you spend watching T.V. on a <u>weekday</u>?
    A. none, or almost none
    B. less than one hour
    C. one to two hours
    D. between two and three hours
    E. three or more hours

13. Which one of the following is your favorite type of T.V. program?
    A. western
    B. quiz shows or contests
    C. interviews or news
    D. sports
    E. comedy

14. Have you ever seriously considered quitting teaching?
    A. yes
    B. no

15. How much time, on the average, do you spend doing school work (preparation, marking, etc.) outside school on a weekday?
    A. none, or almost none
    B. less than one hour
    C. one to two hours
    D. between two and three hours
    E. three or more hours

16. How often do you go to movies?
    A. never, or almost never
    B. about once a month
    C. about once a week
    D. twice a week or more

17. Which one of the following are you really worried about most?
    A. health
    B. professional success
    C. acceptance by friends
    D. others

18. If you could have only one of the following, which one would you choose?
    A. wealth
    B. education
    C. fame
    D. faith

19. Which one of the following do you think is the most important characteristic necessary for success in life?
    A. money
    B. athletics
    C. personality
    D. academic achievement
    E. friendliness

20. How many brothers and sisters do you have?
    A. none
    B. one
    C. two
    D. three
    E. four or more

21. In how many organized activities do you participate outside school? (e.g., curling, bridge, etc.)
    A. none
    B. one
    C. two
    D. three
    E. four or more

22. How many extra-curricular activities do you sponsor or assist with in school? (e.g., school sports, school clubs, students' union, etc.)
    A. none
    B. one
    C. two
    D. three
    E. four or more

Read the following three questions carefully. Two teachers are described in each question. If you had to compare yourself with one of these teachers, which one would you say you'd most nearly be like? If you find it impossible to decide, mark item "E" on the answer sheet.

23. Two teachers are talking about what they would do if they were suddenly to inherit enough money to allow them to live in luxury for the rest of their lives. The first teacher said that he would keep on with teaching on a regular basis because he wouldn't feel right any other way. The second teacher said he wouldn't work regularly any more after he received the money, that he would spend most of his time doing all the things he'd always wanted to enjoy.
    A. very much like the first teacher
    B. somewhat like the first teacher
    C. very much like the second teacher
    D. somewhat like the second teacher
    E. impossible to decide

24. Two teachers were teaching in the same high school. They both felt they couldn't get along with the other teachers and they disliked the school very much. Both of them were planning to quit just as soon as they could find more suitable jobs. The first teacher said that since things were so bad he wasn't going out of his way to work hard, that he was doing just enough to get by. The second teacher said that he was continuing to work as hard as he usually did, that he felt he should do a full day's work.
    A. very much like the first teacher
    B. somewhat like the first teacher
    C. very much like the second teacher
    D. somewhat like the second teacher
    E. impossible to decide

25. Two teachers were discussing their reputations in the school. The first teacher said he thought it was important for a person to watch what he does in public and to associate with a respectable class of people. The second teacher said he doesn't pay too much attention to what other people think of him, that he does what he wants to do and doesn't worry too much.
    A. very much like the first teacher
    B. somewhat like the first teacher
    C. very much like the second teacher
    D. somewhat like the second teacher
    E. impossible to decide

THANK YOU VERY MUCH FOR YOUR COOPERATION.

APPENDIX E

STUDENT ANSWER SHEET

Place a circle around the answer you have chosen.

Please do NOT put your name on this answer sheet.

In what city or town is your school located? ________________

What is your favorite subject in school? ____________________

"I OUGHT TO . . ." ANSWERS

1. A B
2. A B
3. A B
4. A B
5. A B
6. A B
7. A B
8. A B
9. A B
10. A B
11. A B
12. A B
13. A B
14. A B
15. A B
16. A B
17. A B
18. A B
19. A B
20. A B
21. A B
22. A B
23. A B
24. A B
25. A B
26. A B
27. A B
28. A B
29. A B
30. A B
31. A B
32. A B
33. A B
34. A B
35. A B
36. A B
37. A B
38. A B
39. A B
40. A B
41. A B
42. A B
43. A B
44. A B
45. A B
46. A B
47. A B
48. A B
49. A B
50. A B
51. A B
52. A B
53. A B
54. A B
55. A B
56. A B
57. A B
58. A B
59. A B
60. A B
61. A B
62. A B
63. A B
64. A B

STUDENT QUESTIONNAIRE ANSWERS

1. A B C D E
2. A B C
3. A B
4. A B C D E
5. A B C D E
6. A B C D E
7. A B C D E
8. A B
9. A B
10. A B C
11. A B C D E
12. A B C D E
13. A B C D
14. A B C D
15. A B C D E
16. A B C D E
17. A B C D E F
18. A B
19. A B C D
20. A B C D
21. A B C
22. A B C D E F G H I
23. A B C D E
24. A B C D
25. A B C
26. A B C D E
27. A B C D E
28. A B C
29. A B
30. A B
31. A B
32. A B
33. A B
34. A B
35. A B
36. A B

37. A B
38. A B
39. A B
40. A B
41. A B
42. A B
43. A B
44. A B
45. A B
46. A B
47. A B
48. A B
49. A B
50. A B
51. A B C D E
52. A B C D E
53. A B C D E

TEACHER ANSWER SHEET

Place a circle around the answer you have chosen.

Please do NOT put your name on this answer sheet.

In what city or town is your school located? ________________

What subject or subjects are you teaching? ____________________

"I OUGHT TO . . ." ANSWERS

1. A B
2. A B
3. A B
4. A B
5. A B
6. A B
7. A B
8. A B
9. A B
10. A B
11. A B
12. A B
13. A B
14. A B
15. A B
16. A B
17. A B
18. A B
19. A B
20. A B
21. A B
22. A B
23. A B
24. A B
25. A B
26. A B
27. A B
28. A B
29. A B
30. A B
31. A B
32. A B
33. A B
34. A B
35. A B
36. A B
37. A B
38. A B
39. A B
40. A B
41. A B
42. A B
43. A B
44. A B
45. A B
46. A B
47. A B
48. A B
49. A B
50. A B
51. A B
52. A B
53. A B
54. A B
55. A B
56. A B
57. A B
58. A B
59. A B
60. A B
61. A B
62. A B
63. A B
64. A B

TEACHER QUESTIONNAIRE ANSWERS

1. A B C D E F G H I
2. A B C D E F G H I
3. A B
4. A B C D E F G H I
5. A B C D E
6. A B
7. A B C
8. A B C D
9. A B C D E
10. A B C D
11. A B C D
12. A B C D E
13. A B C D E
14. A B
15. A B C D E
16. A B C D
17. A B C D
18. A B C D
19. A B C D E
20. A B C D E
21. A B C D E
22. A B C D E
23. A B C D E
24. A B C D E
25. A B C D E

APPENDIX F

TO: ALL HIGH SCHOOL PRINCIPALS

Would you assist me with my research to this extent:

1. Give these to your staff members beginning with the person at the top of the new teachers list--including only those who teach some high school subjects. Please do not reveal my name as this invariably creates what is called an interactive effect and tends to nullify the responses.
2. Put the results in an envelope and mail it back to me. If the staff member is interested in the results indicate to him privately that I would supply information but that I probably would not know who had answered which questionnaire.
3. The students' questionnaire can be given to any "volunteer" provided that there is an attempt to include both boys and girls from Grades 10, 11 and 12. Perhaps your counsellor would help in this administration.
4. Please ask that the questionnaires be answered completely and emphasize to the student or staff member that the questionnaire is NOT a test.

APPENDIX G

CROSS-TABULATION RESULTS

G.1. STUDENTS/TEACHERS VS. SELECTED VARIABLES

Member of Church

Item No. 1 (Students = 9) by Item No. 1 (Teachers = 6)

Percentage by Rows

1	57.6	42.4	73.8
2	42.9	57.1	26.2
Total	53.8	46.3	100.0

Chi-square = 1.359 with 1 degree of freedom
probability = 0.243
Phi = 0.1303

Attend Church Regularly

Item No. 2 (Students = 10) by Item No. 1 (Teachers = 7)

Percentage by Columns

1	20.9	37.8	28.8
2	11.6	35.1	22.5
3	67.4	27.0	48.8
Total	53.8	46.3	100.0

Chi-square = 13.525 with 2 degrees of freedom
probability = 0.001
Pearson-S Contingency Coefficient, C = 0.3803

G.2. FEMALE/MALE STUDENTS VS. SELECTED VARIABLES

Member of Church

Item No. 1 (Female = 9) by Item No. 2 (Male = 6)

Percentage by Columns

1	75.0	82.6	79.1
2	25.0	17.4	20.9
Total	46.5	53.5	100.0

Chi-square = 0.056 with 1 degree of freedom
probability = 0.813
Phi = -0.0933

Attend Church Regularly

Item No. 2 (Female = 10) by Item No. 2 (Male = 7)

Percentage by Columns

1	35.0	8.7	20.9
2	20.0	4.3	11.6
3	45.0	87.0	67.4
Total	46.5	53.5	100.0

Chi-square = 8.583 with 2 degrees of freedom
probability = 0.013
Pearson-S Contingency Coefficient, C = 0.4079

G.3. FEMALE/MALE TEACHERS VS. SELECTED VARIABLES

Member of Church

Item No. 1 (Female = 9) by Item No. 2 (Male = 6)

Percentage by Columns

1	72.2	63.2	67.6
2	27.8	36.8	32.4
Total	48.6	51.4	100.0

Chi-square = 0.347 with 1 degree of freedom
probability = 0.556
Phi = 0.0968

Attend Church Regularly

Item No. 2 (Female = 10) by Item No. 2 (Male = 7)

Percentage by Columns

1	50.0	26.3	37.8
2	22.2	47.4	35.1
3	27.8	26.3	27.0
Total	48.6	51.4	100.0

Chi-square = 3.041 with 2 degrees of freedom
probability = 0.218
Pearson-S Contingency Coefficient, C = 0.2756

Money and Importance of Work

Item No. 12 (Students = 51) by Item No. 1 (Teachers = 23)

Percentage by Columns

1	27.3	5.7	17.7
2	43.2	34.3	39.2
3	0.0	17.1	7.6
4	11.4	8.6	25.3
5	11.4	8.6	10.1
Total	55.7	44.3	100.0

Chi-square = 15.195 with 4 degrees of freedom
probability = .004
Pearson-S Contingency Coefficient, C = 0.4016

Responsibility and Importance of Work

Item No. 13 (Students = 52) by Item No. 1 (Teachers = 24)

Percentage by Columns

1	6.8	2.9	5.1
2	2.3	8.6	5.1
3	25.0	51.4	36.7
4	50.0	34.3	43.0
5	15.9	2.9	10.1
Total	55.7	44.3	100.0

Chi-square = 10.238 with 4 degrees of freedom
probability = 0.036
Pearson-S Contingency Coefficient, C = 0.3387

Importance of Reputation

Item No. 14 (Students = 53) by Item No. 1 (Teachers = 24)

Percentage by Columns

1	22.7	11.4	17.7
2	36.4	31.4	34.2
3	9.1	8.6	8.9
4	27.3	34.3	30.4
5	4.5	14.3	8.9
Total	55.7	44.3	100.0

Chi-square = 3.952 with 4 degrees of freedom
probability = 0.412
Pearson-S Contingency Coefficient, C = 0.2183

```
TEACHER DVI VS INDEPENDENT VARIABLES
            ITEM NO. [illegible]   BY   ITEM NO.   2
```

- CHOICE OF IMPORTANCE (20-18)

```
              1         2
     1        4         8        12
     2        7         8        15
     3        2         0         2
     4        5         3         8
 TOTAL       18        19        37
 PERCENTAGE BY ROWS
     1     33.3      66.7      32.4
     2     46.7      53.3      40.5
     3    100.0       0.0       5.4
     4     62.5      37.5      21.6
 TOTAL     48.6      51.4     100.0
 PERCENTAGE BY COLUMNS
     1     22.2      42.1      32.4
     2     38.9      42.1      40.5
     3     11.1       0.0       5.4
     4     27.8      15.8      21.6
 TOTAL     48.6      51.4     100.0
 PERCENTAGE BY TOTAL
     1     10.8      21.6      32.4
     2     18.9      21.6      40.5
     3      5.4       0.0       5.4
     4     13.5       8.1      21.6
 TOTAL     48.6      51.4     100.0
 CHI-SQUARE =      3.876    WITH        3  DEGREES OF FREEDOM   PROBABILITY =   0.275192
 PEARSON-S CONTINGENCY COEFFICIENT, C   =   0.3079
TEACHER DVI VS INDEPENDENT VARIABLES
            ITEM NO.  9    BY   ITEM NO.   2
```

- SOURCE(S) OF CONCERN (24-17)

```
              1         2
     1        2         0         2
     2        9         4        13
     3        2         2         4
     4        5        12        17
 TOTAL       18        18        36
 PERCENTAGE BY ROWS
     1    100.0       0.0       5.6
     2     69.2      30.8      36.1
     3     50.0      50.0      11.1
     4     29.4      70.6      47.2
 TOTAL     50.0      50.0     100.0
 PERCENTAGE BY COLUMNS
     1     11.1       0.0       5.6
     2     50.0      22.2      36.1
     3     11.1      11.1      11.1
     4     27.8      66.7      47.2
 TOTAL     50.0      50.0     100.0
 PERCENTAGE BY TOTAL
     1      5.6       0.0       5.6
     2     25.0      11.1      36.1
     3      5.6       5.6      11.1
     4     13.9      33.3      47.2
 TOTAL     50.0      50.0     100.0
 CHI-SQUARE =      6.805    WITH        3  DEGREES OF FREEDOM   PROBABILITY =   0.078365
 PEARSON-S CONTINGENCY COEFFICIENT, C   =   0.3987
TEACHER DVI VS INDEPENDENT VARIABLES
            ITEM NO. 10    BY   ITEM NO.   2
```

- LEAVING TEACHING (18 - 14)

```
              1         2
     1       12        12        24
     2        6         7        13
 TOTAL       18        19        37
 PERCENTAGE BY ROWS
     1     50.0      50.0      64.9
     2     46.2      53.8      35.1
 TOTAL     48.6      51.4     100.0
 PERCENTAGE BY COLUMNS
     1     66.7      63.2      64.9
     2     33.3      36.8      35.1
 TOTAL     48.6      51.4     100.0
 PERCENTAGE BY TOTAL
     1     32.4      32.4      64.9
     2     16.2      18.9      35.1
 TOTAL     48.6      51.4     100.0
 CHI-SQUARE =      0.050    WITH        1  DEGREES OF FREEDOM   PROBABILITY =   0.823181
*PHI =     0.0367
```